

BEFORE THE
PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

EXHIBIT PMA-1
TO ACCOMPANY THE
PREPARED DIRECT TESTIMONY
OF

PAULINE M. AHERN, CRRA
PRINCIPAL
AUS CONSULTANTS

ON BEHALF OF
TEGA CAY WATER SERVICE, INC.

APRIL 2010

Tega Cay Water Service, Inc.
Table of Contents
to Exhibit PMA-1
of Pauline M. Ahern, CRRA

	<u>Schedule</u>
Summary of Cost of Capital and Fair Rate of Return	1
Standard & Poor's Public Utility Rating Methodology Profile and Revised Public Utility Financial Indicative Ratios	2
Financial Profile of the Proxy Group of Six AUS Utility Reports Water Companies	3
Financial Profile of the Proxy Group of Ten AUS Natural Gas Distribution Companies	4
Inadequacy of DCF Return Related to Book Value	5
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model	6
Derivation of Dividend Yield for Use in the Discounted Cash Flow Model	7
Current Institutional Holdings	8
Projected Growth for Use in the Discounted Cash Flow Model	9
Indicated Common Equity Cost Rate Using the Risk Premium Model	10
Indicated Common Equity Cost Rate Using the Capital Asset Pricing Model	11
Indicated Common Equity Cost Rate Using the Comparable Earnings Model	12

Tega Cay Water Service, Inc.
Summary of Cost of Capital and Fair Rate of Return
Based upon the Consolidate Capital Structure of Utilities, Inc. at March 31, 2010

<u>Type of Capital</u>	<u>Ratios (1)</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>	
Long-Term Debt	52.30%	6.60% (1)	3.45%	3.45%
Common Equity	<u>47.70%</u>	10.90% - 11.45% (2)	<u>5.20%</u>	<u>5.46%</u>
Total	<u>100.00%</u>		<u>8.65%</u>	- <u>8.91%</u>

(1) Company-provided.

(2) Based upon informed judgment from the entire study, the principal results of which are summarized on page 2.

Tega Cay Water Service, Inc.
Brief Summary of Common Equity Cost Rate

No.	Principal Methods	Proxy Group of Six AUS Utility Reports Water Companies	Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies
1.	Discounted Cash Flow Model (DCF) (1)	11.70 %	9.42 %
2.	Risk Premium Model (RPM) (2)	10.56	10.53
3.	Capital Asset Pricing Model (CAPM) (3)	10.37	10.04
4.	Comparable Earnings Model (CEM) (4)	14.00	NMF
5.	Indicated Common Equity Cost Rate before Adjustment for Business Risks	11.15 %	10.00 %
6.	Business Risk Adjustment Due to Small Size (5)	<u>0.30</u>	<u>0.40</u>
7.	Indicated Common Equity Cost Rate	<u>11.45 %</u>	<u>10.40 %</u>
8.	Recommended Range of Common Equity Cost Rate	<u>10.90% - 11.45%</u>	

- Notes: (1) From Schedule 6.
(2) From page 1 of Schedule 10.
(3) From page 1 Schedule 11.
(4) The CEM results are on Page 1 of Schedule 12. Ms. Ahern considers the result for the proxy group of nine AUS Utility Reports electric and combination electric and gas companies abberant relative to the other cost of equity models and are not meaningful (NMF) in this particular study as explained in her direct testimony.
(5) Business risk adjustment to reflect Tega Cay Water Service, Inc.'s greater business risk due to its small size relative to the proxy group as detailed in Ms. Ahern's accompanying direct testimony.

Tega Cay Water Service, Inc.
Derivation of Investment Risk Adjustment Based upon
Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

Line No.	1	2	3	4
	Market Capitalization on April 9, 2010 (1) (millions)	Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	Applicable Size Premium (3)	Spread from Applicable Size Premium for (4)
1.				
	Tega Cay Water Service, Inc.			
a.	Based Upon the Proxy Group of Six AUS Utility Reports Water Companies			
	\$ 5.749	10	6.28%	
b.	Based Upon the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies			
	\$ 5.332	10	6.28%	
2.	\$ 759.657	132.1 x	2.11%	4.17%
	Proxy Group of Six AUS Utility Reports Water Companies			
3.	\$ 1,593.253	298.8 x	1.71%	4.57%
	Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies			

(A)	(B)	(C)	(D)	(E)
Decile	Number of Companies (millions)	Recent Total Market Capitalization (millions)	Recent Average Market Capitalization (millions)	Size Premium (Return in Excess of CAPM) (2)
Largest	1 168	\$ 8,067,379.357	\$ 48,020.115	-0.37%
	2 176	1,681,320.126	\$ 9,552.955	0.74%
	3 174	802,997.270	\$ 4,614.927	0.85%
	4 185	566,025.344	\$ 3,059.596	1.15%
	5 215	435,313.426	\$ 2,024.714	1.69%
	6 241	319,576.916	\$ 1,326.045	1.73%
	7 305	281,895.344	\$ 924.247	1.73%
	8 417	197,085.621	\$ 472.627	2.49%
	9 560	178,722.563	\$ 319.147	2.85%
Smallest	10 1361	118,046.268	\$ 86.735	6.28%

*From pages 7 and 11 of this Schedule

Notes:

- (1) From Page 3 of this Schedule.
- (2) Gleaned from Column (D) on the bottom of this page. The appropriate decile (Column (A)) corresponds to the market capitalization of the proxy group, which is found in Column (E).
- (3) Corresponding risk premium to the decile is provided on Column (E) on the bottom of this page.
- (4) Line No. 1a Column 3 – Line No. 2 Column 3 and Line No. 1b, Column 3 – Line No. 3 of Column 3 etc.. For example, the 4.17% in Column 4, Line No. 2 is derived as follows 4.17% = 6.28% - 2.11%.

Tega Cay Water Service, Inc.
Market Capitalization of Tega Cay Water Service, Inc. and
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

		1	2	3	4	5	6
Company	Exchange	Common Stock Shares Outstanding at Fiscal Year End 2009 (millions)	Book Value per Share at Fiscal Year End 2009 (1)	Total Common Equity at Fiscal Year End 2009 (millions)	Closing Stock Market Price on April 09, 2010	Market-to-Book Ratio on April 09, 2010 (2)	Market Capitalization on April 09, 2010 (3) (millions)
Tega Cay Water Service, Inc.		NA	NA	2,982 (4)	NA		
Based Upon the Proxy Group of Six AUS Utility Reports Water Companies						192.8 % (5)	\$ 5,749 (6)
Based Upon the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies						178.8 % (6)	\$ 5,332 (7)
Proxy Group of Six AUS Utility Reports Water Companies							
American States Water Co.		18,532	\$ 19,395	\$ 359,430	\$ 37.820	195.0 %	\$ 700,892
Aqua America, Inc.		137,149	\$ 8,085	\$ 1,108,904	\$ 17,920	221.6	\$ 2,457,706
California Water Service Group		20,765	\$ 20,257	\$ 420,634	\$ 38,080	188.0	\$ 790,731
Connecticut Water Service, Inc.		8,574	\$ 12,663	\$ 108,569	\$ 23,180	183.1	\$ 198,739
Middlesex Water Company		13,519	\$ 10,329	\$ 139,631	\$ 17,480	169.2	\$ 236,312
York Water Company		12,559	\$ 6,921	\$ 86,922	\$ 13,820	199.7	\$ 173,562
Average		35,183	\$ 12,942	\$ 370,682	\$ 24,717	192.8 %	\$ 759,657
Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies							
AGL Resources Inc.		77,500	\$ 22,968	\$ 1,780,000	\$ 38,250	166.5 %	\$ 2,964,375
Atmos Energy Corporation		92,552	\$ 23,519	\$ 2,176,761	\$ 29,330	124.7	\$ 2,714,542
Delta Natural Gas Company		3,318	\$ 16,725	\$ 55,493	\$ 29,420	175.9	\$ 97,617
Laclede Group, Inc.		22,168	\$ 23,323	\$ 517,030	\$ 34,500	147.9	\$ 764,800
New Jersey Resources Corp.		43,762	\$ 15,761	\$ 689,726	\$ 38,490	244.2	\$ 1,684,418
Northwest Natural Gas Co.		26,533	\$ 24,879	\$ 660,105	\$ 46,880	188.4	\$ 1,243,868
Piedmont Natural Gas Co., Inc.		73,266	\$ 12,665	\$ 927,948	\$ 27,620	218.1	\$ 2,023,607
South Jersey Industries, Inc.		29,796	\$ 18,276	\$ 544,564	\$ 42,900	234.7	\$ 1,278,258
Southwest Gas Corporation		45,092	\$ 24,442	\$ 1,102,127	\$ 30,970	126.7	\$ 1,396,491
WGL Holdings, Inc.		50,143	\$ 21,891	\$ 1,097,698	\$ 35,190	160.8	\$ 1,764,549
Average		46,413	\$ 20,445	\$ 955,145	\$ 35,355	178.8 %	\$ 1,593,253

NA= Not Available

Notes: (1) Column 3 / Column 1.

(2) Column 4 / Column 2.

(3) Column 5 * Column 3.

(4) From Financial Statements of Tega Cay Water Service, Inc. for Fiscal Year End 2009.

(5) The market-to-book ratio of Tega Cay Water Service, Inc. on April 09, 2010 is assumed to be equal to the market-to-book ratio of the Proxy Group of Six AUS Utility Reports Water Companies at April 09, 2010.

(6) Tega Cay Water Service, Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at April 09, 2010 of the Proxy Group of Six AUS Utility Reports Water Companies, 192.8%, and Tega Cay Water Service, Inc.'s market capitalization on April 09, 2010 would therefore have been \$5,749 million.

(7) The market-to-book ratio of Tega Cay Water Service, Inc. on April 09, 2010 is assumed to be equal to the market-to-book ratio of the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies at April 09, 2010.

(8) Tega Cay Water Service, Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at April 09, 2010 of the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies, 178.8%, and Tega Cay Water Service, Inc.'s market capitalization on April 09, 2010 would therefore have been \$5,332 million.

Source of Information: 2009 Annual Forms 10K
yahoo.finance.com

Ibbotson® S&P®
2010 Valuation Yearbook

Market Results for
Stocks, Bonds, Bills, and Inflation
1926–2009



Chapter 7

Firm Size and Return

The Firm Size Phenomenon

One of the most remarkable discoveries of modern finance is that of a relationship between firm size and return. The relationship cuts across the entire size spectrum but is most evident among smaller companies, which have higher returns on average than larger ones. Many studies have looked at the effect of firm size on return.¹ In this chapter, the returns across the entire range of firm size are examined.

Size and Liquidity

Capitalization is not necessarily the underlying cause of the higher returns for smaller companies. While smaller companies are usually less liquid, with fewer shares traded on any given day, not all companies of the same size have the same liquidity. Stocks that are more liquid have higher valuations for the same cash flows because they have a lower cost of capital and commensurately lower returns on average. Stocks that are less liquid have a higher cost of capital and higher returns on average.²

While it would be very useful to estimate the equity cost of capital of companies that are not publicly traded, there is not a direct measure of liquidity for these companies because there are no public trades. Thus, there is usually no share turnover, no bid/ask spreads, etc. in which to measure liquidity. Even though liquidity is not directly observable, capitalization is; thus the size premium can serve as a partial measure of the increased cost of capital of a less liquid stock.

Size premiums presented in this book are measured from publicly traded companies of various sizes and therefore do not represent the full cost of capital for non-traded companies. The valuation for a non-publicly traded company should also reflect a discount for the very fact that it is not traded. This would be an liquidity discount and could be applied to the valuation directly, or alternatively reflected as an liquidity premium in the cost of capital.

This chapter does not tell you how to estimate this incremental liquidity valuation discount (or cost of capital liquidity premium) that is not covered by the size premium. At the end of this chapter, we show some empirical results on the impact of liquidity on stock returns.

Construction of the Decile Portfolios

The portfolios used in this chapter are those created by the Center for Research in Security Prices (CRSP) at the University of Chicago's Graduate School of Business. CRSP has refined the methodology of creating size-based portfolios and has applied this methodology to the entire universe of NYSE/AMEX/NASDAQ-listed securities going back to 1926.

The New York Stock Exchange universe excludes closed-end mutual funds, preferred stocks, real estate investment trusts, foreign stocks, American Depositary Receipts, unit investment trusts, and Americus Trusts. All companies on the NYSE are ranked by the combined market capitalization of their eligible equity securities. The companies are then split into 10 equally populated groups, or deciles. Eligible companies traded on the NYSE, NYSE AMEX, and the Nasdaq National Market (NASDAQ) are then assigned to the appropriate deciles according to their capitalization in relation to the NYSE breakpoints. The portfolios are rebalanced, using closing prices for the last trading day of March, June, September, and December. Securities added during the quarter are assigned to the appropriate portfolio when two consecutive month-end prices are available. If the final NYSE price of a security that becomes delisted is a month-end price, then that month's return is included in the quarterly return of the security's portfolio. When a month-end NYSE price is missing, the month-end value of the security is derived from merger terms, quotations on regional exchanges, and other sources. If a month-end value still is not determined, the last available daily price is used.

Base security returns are monthly holding period returns. All distributions are added to the month-end prices, and appropriate price adjustments are made to account for stock splits and dividends. The return on a portfolio for one month is calculated as the weighted average of the returns for its individual stocks. Annual portfolio returns are calculated by compounding the monthly portfolio returns.

Table 7-1: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Number of Companies, Historical and Recent Market Capitalization

Decile	Historical Average Percentage of Total Capitalization	Recent Number of Companies	Recent Decile Market Capitalization (in Thousands)	Recent Percentage of Total Capitalization
1	63.26%	168	\$8,067,379,357	63.78%
2	13.94	176	1,681,320,126	13.29
3	7.54	174	802,997,270	6.35
4	4.72	185	566,025,344	4.48
5	3.24	215	435,313,426	3.44
6	2.39	241	319,576,916	2.53
7	1.76	305	281,895,344	2.23
8	1.31	417	197,085,621	1.56
9	1.02	560	178,722,563	1.41
10-Smallest	0.83	1,361	118,046,268	0.93
Mid-Cap 3-5	15.49	574	1,804,336,040	14.27
Low-Cap 6-8	5.45	963	798,557,882	6.31
Micro-Cap 9-10	1.86	1,921	296,768,831	2.35

Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Historical average percentage of total capitalization shows the average, over the last 84 years, of the decile market values as a percentage of the total NYSE/AMEX/NASDAQ calculated each month. Number of companies in deciles, recent market capitalization of deciles and recent percentage of total capitalization are as of December 31, 2009.

Table 7-2: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ,
Largest Company and Its Market Capitalization by Decile

Decile	Recent Market Capitalization (in Thousands)	Company Name
1-Largest	\$329,725,255	Exxon Mobil Corp.
2	14,691,668	Sysco Corp.
3	5,936,147	American International Group Inc.
4	3,414,634	Resmed Inc.
5	2,384,026	Mirant Corp.
6	1,600,169	Cypress Semiconductor Corp.
7	1,063,308	Enersys
8	684,790	Live Nation Inc.
9	431,256	American Reprographics Co.
10-Smallest	214,111	Quicksilver Gas Services LP

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission. Market capitalization and name of largest company in each decile as of September 30, 2009.

Size of the Deciles

Table 7-1 reveals that the top three deciles of the NYSE/AMEX/NASDAQ account for most of the total market value of its stocks. Nearly two-thirds of the market value is represented by the first decile, which currently consists of 168 stocks, while the smallest decile accounts for just over one percent of the market value. The data in the second column of Table 7-1 are averages across all 84 years. Of course, the proportion of market value represented by the various deciles varies from year to year.

Columns three and four give recent figures on the number of companies and their market capitalization, presenting a snapshot of the structure of the deciles as of December 31, 2009.

Table 7-2 gives the current breakpoints that define the composition of the NYSE/AMEX/NASDAQ size deciles. The largest company and its market capitalization are presented for each decile. Table 7-3 shows the historical breakpoints for each of the three size groupings presented throughout this chapter. Mid-cap stocks are defined here as the aggregate of deciles 3–5. Based on the most recent data (Table 7-2), companies within this mid-cap range have market capitalizations at or below \$5,936,147,000 but greater than \$1,600,169,000. Low-cap stocks include deciles 6–8 and currently include all companies in the NYSE/AMEX/NASDAQ with market capitalizations at or below \$1,600,169,000 but greater than \$431,256,000. Micro-cap stocks include deciles 9–10 and include companies with market capitalizations at or below \$431,256,000. The market capitalization of the smallest company included in the micro-capitalization group is currently \$1,006,616.

Presentation of the Decile Data

Summary statistics of annual returns of the 10 deciles over 1926–2009 are presented in Table 7-4. Note from this exhibit that both the average return and the total risk, or standard deviation of annual returns, tend to increase as one moves from the largest decile to the smallest. Furthermore, the serial correlations of returns are near zero for all but the smallest deciles. Serial correlations and their significance will be discussed in detail later in this chapter.

Table 7-3: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ:
Largest and Smallest Company by Size Group (Continued)

1926-1965

Date	Capitalization of Largest Company (in Thousands)			Capitalization of Smallest Company (in Thousands)		
	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10
1926	\$60,103	\$13,795	\$4,213	\$13,800	\$4,263	\$43
1927	64,820	14,491	4,415	14,522	4,450	65
1928	80,910	18,761	5,074	18,788	5,119	135
1929	103,054	24,328	5,862	24,480	5,873	118
1930	66,750	12,918	3,359	13,050	3,369	30
1931	42,607	8,142	1,927	8,222	1,944	15
1932	12,212	2,208	468	2,223	469	19
1933	40,298	7,210	1,830	7,280	1,875	120
1934	38,019	6,636	1,673	6,669	1,691	69
1935	37,631	6,549	1,350	6,605	1,383	38
1936	46,963	11,505	2,754	11,526	2,800	98
1937	51,750	13,635	3,539	13,793	3,563	68
1938	35,019	8,372	2,195	8,400	2,200	60
1939	35,409	7,478	1,819	7,500	1,854	75
1940	29,903	7,990	1,861	8,007	1,872	51
1941	30,362	8,316	2,086	8,336	2,087	72
1942	26,037	6,868	1,770	6,870	1,779	82
1943	42,721	11,403	3,847	11,475	3,903	395
1944	46,221	13,066	4,812	13,068	4,820	309
1945	55,125	17,325	6,413	17,575	6,428	225
1946	77,784	24,192	10,149	24,199	10,168	829
1947	57,830	17,719	6,373	17,735	6,380	508
1948	67,238	19,632	7,329	19,651	7,348	683
1949	56,082	14,549	5,037	14,577	5,108	379
1950	66,143	18,675	6,225	18,700	6,243	303
1951	82,517	22,750	7,598	22,860	7,600	668
1952	95,636	25,405	8,428	25,452	8,480	480
1953	98,218	25,340	8,156	25,374	8,168	459
1954	125,834	29,707	8,488	29,791	8,502	463
1955	170,829	41,445	12,366	41,681	12,444	553
1956	183,792	46,805	13,524	46,886	13,623	1,122
1957	194,300	47,658	13,844	48,509	13,848	925
1958	195,536	46,774	13,789	46,871	13,816	550
1959	256,283	64,110	19,548	64,221	19,701	1,804
1960	252,292	61,485	19,293	61,529	19,344	831
1961	296,261	77,983	23,562	77,996	23,613	2,455
1962	250,786	58,785	18,952	58,866	18,968	1,018
1963	308,903	71,846	23,927	71,971	24,056	296
1964	349,675	79,508	25,595	79,937	25,607	223
1965	365,675	84,600	28,483	85,065	28,543	250

Table 7-3 (Continued)

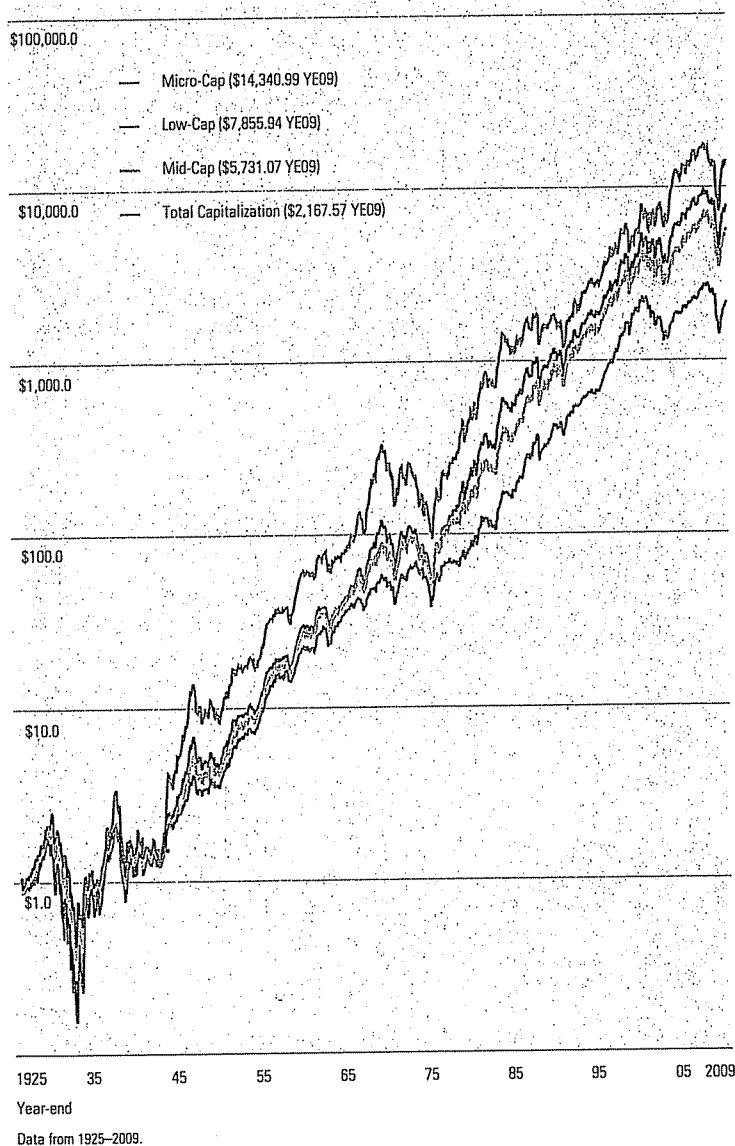
Size-Decile Portfolios of the NYSE/AMEX/NASDAQ:

Largest and Smallest Company by Size Group (Continued)

1966-2009

Date	Capitalization of Largest Company (in Thousands)			Capitalization of Smallest Company (in Thousands)		
	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10
1966	403,137	99,960	34,884	100,107	34,966	381
1967	459,438	118,988	42,188	119,635	42,237	381
1968	531,306	150,893	60,543	151,260	60,719	592
1969	518,485	146,792	54,353	147,311	54,503	2,119
1970	382,884	94,754	29,916	94,845	29,932	822
1971	551,690	147,426	45,570	147,810	45,571	865
1972	557,181	143,835	46,728	144,263	46,757	1,031
1973	431,354	96,699	29,352	96,710	29,430	551
1974	356,876	79,878	23,355	80,280	23,400	444
1975	477,054	102,313	30,353	103,283	30,394	540
1976	566,296	121,717	34,864	121,992	34,901	564
1977	584,577	139,196	40,700	139,620	40,765	513
1978	580,881	164,093	47,927	164,455	48,038	830
1979	665,019	177,378	51,197	177,769	51,274	948
1980	762,195	199,312	50,496	199,315	50,544	549
1981	962,397	264,690	72,104	264,783	72,450	1,446
1982	770,517	210,301	55,336	210,630	55,423	1,060
1983	1,209,911	353,889	104,382	356,238	104,588	2,025
1984	1,075,436	315,965	91,004	316,103	91,195	2,093
1985	1,440,436	370,224	94,875	370,729	94,887	760
1986	1,857,621	449,015	110,617	449,462	110,953	706
1987	2,059,143	468,948	113,419	470,662	113,430	1,277
1988	1,957,926	421,340	94,449	421,675	94,573	696
1989	2,145,947	480,975	100,285	483,623	100,384	96
1990	2,171,217	474,065	93,750	474,477	93,790	132
1991	2,129,863	457,958	87,586	458,853	87,733	278
1992	2,428,671	500,327	103,352	500,346	103,500	510
1993	2,705,192	603,588	137,105	607,449	137,137	602
1994	2,470,244	596,059	148,104	597,975	148,216	598
1995	2,789,938	647,210	155,386	647,253	155,532	89
1996	3,142,657	751,316	193,001	751,680	193,016	1,043
1997	3,484,440	813,923	228,900	814,355	229,058	585
1998	4,216,707	925,688	252,553	926,215	253,031	1,671
1999	4,251,741	875,309	220,397	875,582	220,456	1,502
2000	4,143,902	840,000	192,083	840,730	192,439	1,393
2001	5,156,315	1,108,224	265,734	1,108,969	265,736	443
2002	4,930,326	1,116,525	308,980	1,124,331	309,245	501
2003	4,744,580	1,163,369	329,060	1,163,423	329,529	332
2004	6,241,953	1,607,854	505,437	1,607,931	506,410	1,393
2005	7,187,244	1,728,888	586,393	1,729,364	587,243	1,079
2006	7,777,183	1,946,588	626,955	1,947,240	627,017	2,247
2007	9,206,713	2,411,794	723,258	2,413,583	725,267	1,922
2008	7,360,271	1,848,961	453,254	1,849,950	453,398	1,575
2009	5,936,147	1,600,169	431,256	1,602,429	432,175	1,007

Graph 7-1: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Wealth Indices of Investments in Mid-, Low-, Micro-, and Total Capitalization Stocks
Index (Year-End 1925 = \$1.00)



Graph 7-1 depicts the growth of one dollar invested in each of three NYSE/AMEX/NASDAQ groups broken down into mid-cap, low-cap, and micro-cap stocks. The index value of the entire NYSE/AMEX/NASDAQ is also included. All returns presented are value-weighted based on the market capitalizations of the deciles contained in each subgroup. The sheer magnitude of the size effect in some years is noteworthy. While the largest stocks actually declined 9 percent in 1977, the smallest stocks rose more

than 20 percent. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and tenth decile returns was far more substantial, with the largest stocks rising 46 percent, and the smallest stocks rising 218 percent. This divergence in the performance of small and large company stocks is a common occurrence.

Table 7-4: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Summary Statistics of Annual Returns

Decile	Geometric Mean	Arithmetic Mean	Standard Deviation	Serial Correlation
1-Largest	9.1	10.9	19.4	0.07
2	10.4	12.8	22.4	0.01
3	10.7	13.4	23.9	-0.04
4	10.7	13.8	26.2	-0.03
5	11.3	14.6	27.0	-0.04
6	11.2	14.8	27.6	0.02
7	11.2	15.2	29.8	0.00
8	11.4	16.3	34.4	0.04
9	11.5	17.0	36.7	0.04
10-Smallest	13.1	20.9	45.2	0.14
Mid Cap	10.9	13.7	25.0	-0.04
Low Cap	11.3	15.2	29.4	0.02
Micro	12.1	18.2	39.2	0.07
NYSE/AMEX/ NASDAQ Total Value Weighted Index	9.6	11.6	20.5	0.01

Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Results are for quarterly re-ranking for the deciles. The small company stock summary statistics presented in earlier chapters comprise a re-ranking of the portfolios every five years prior to 1982.

Aspects of the Firm Size Effect

The firm size phenomenon is remarkable in several ways. First, the greater risk of small stocks does not, in the context of the capital asset pricing model (CAPM), fully account for their higher returns over the long term. In the CAPM only systematic, or beta risk, is rewarded; small company stocks have had returns in excess of those implied by their betas.

Second, the calendar annual return differences between small and large companies are serially correlated. This suggests that past annual returns may be of some value in predicting future annual returns. Such serial correlation, or autocorrelation, is practically unknown in the market for large stocks and in most other equity markets but is evident in the size premia.

Table 7-5: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Long-Term Returns in Excess of CAPM

Decile	Beta*	Arith- metic Mean Return (%)	Actual Return in Excess of Riskless Rate** (%)	CAPM Return in Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1-Largest	0.91	10.90	5.72	6.09	-0.37
2	1.03	12.81	7.64	6.90	0.74
3	1.10	13.36	8.18	7.33	0.85
4	1.12	13.82	8.65	7.50	1.15
5	1.16	14.59	9.41	7.72	1.69
6	1.18	14.81	9.63	7.90	1.73
7	1.24	15.19	10.01	8.28	1.73
8	1.30	16.33	11.15	8.67	2.49
9	1.35	17.01	11.84	8.99	2.85
10-Smallest	1.41	20.85	15.68	9.39	6.28
Mid-Cap, 3-5	1.12	13.71	8.54	7.45	1.08
Low-Cap, 6-8	1.23	15.20	10.03	8.18	1.85
Micro-Cap, 9-10	1.36	18.23	13.06	9.07	3.99

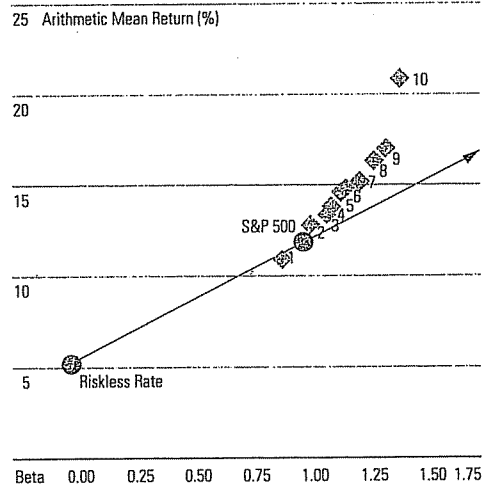
Data from 1926–2009.

*Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2009.

**Historical riskless rate measured by the 64-year arithmetic mean income return component of 20-year government bonds (5.18).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.85 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

Graph 7-2: Security Market Line Versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ



Data from 1926–2009.

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Third, the firm size effect is seasonal. For example, small company stocks outperformed large company stocks in the month of January in a large majority of the years. Such predictability is surprising and suspicious in light of modern capital market theory. These three aspects of the firm size effect—long-term returns in excess of systematic risk, serial correlation, and seasonality—will be analyzed thoroughly in the following sections.

Long-Term Returns in Excess of Systematic Risk

The capital asset pricing model (CAPM) does not fully account for the higher returns of small company stocks. Table 7-5 shows the returns in excess of systematic risk over the past 84 years for each decile of the NYSE/AMEX/NASDAQ. Recall that the CAPM is expressed as follows:

$$k_s = r_f + (\beta_s \times \text{ERP})$$

Table 7-5 uses the CAPM to estimate the return in excess of the riskless rate and compares this estimate to historical performance. According to the CAPM, the expected return on a security should consist of the riskless rate plus an additional return to compensate for the systematic risk of the security. The return in excess of the riskless rate is estimated in the context of the CAPM by multiplying the equity risk premium by β (beta). The equity risk premium is the return that compensates investors for taking on risk equal to the risk of the market as a whole (systematic risk).³ Beta measures the extent to which a security or portfolio is exposed to systematic risk.⁴ The beta of each decile indicates the degree to which the decile's return moves with that of the overall market.

A beta greater than one indicates that the security or portfolio has greater systematic risk than the market; according to the CAPM equation, investors are compensated for taking on this additional risk. Yet, Table 7-5 illustrates that the smaller deciles have had returns that are not fully explained by their higher betas. This return in excess of that predicted by CAPM increases as one moves from the largest companies in decile 1 to the smallest in decile 10. The excess return is especially pronounced for micro-cap stocks (deciles 9–10). This size-related phenomenon has prompted a revision to the CAPM, which includes a size premium. Chapter 4 presents this modified CAPM theory and its application in more detail.

Table 7-6: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ

10th Decile Sub-Portfolios

Decile	Recent Number of Companies	Market Capitalization of Largest Company (in Thousands)	Company Name
10a	395	214,111	Quicksilver Gas Services L P
10w	163	214,111	Quicksilver Gas Services L P
10x	232	169,497	Landry's Restaurants, Inc.
10b	1,382	123,516	Lee Enterprises
10y	302	123,516	Lee Enterprises
10z	1,080	76,052	Federal Agricultural Mortgage Corporation A

Note: These numbers may not aggregate to equal decile 10 figures.

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Market capitalization and name of largest company in each decile as of September 30, 2009.

This phenomenon can also be viewed graphically, as depicted in Graph 7-2. The security market line is based on the pure CAPM without adjustment for the size premium. Based on the risk (or beta) of a security, the expected return lies on the security market line. However, the actual historic returns for the smaller deciles of the NYSE/AMEX/NASDAQ lie above the line, indicating that these deciles have had returns in excess of that which is appropriate for their systematic risk.

Further Analysis of the 10th Decile

The size premia presented thus far do a great deal to explain the return due solely to size in publicly traded companies. However, by splitting the 10th decile into further size groupings we can get a closer look at the smallest companies. This magnification of the smallest companies will demonstrate whether the company size to size premia relationship continues to hold true.

Ibbotson first split the 10th decile into 10a and 10b in the 2001 Ibbotson SBBI Valuation Yearbook. With the 2010 Ibbotson SBBI Valuation Yearbook, we introduce an even closer look at the smallest companies by splitting 10a into 10w and 10x, and splitting 10b into 10y and 10z.

As previously discussed, the method for determining the size groupings for size premia analysis was to take the stocks traded on the NYSE and break them up into 10 deciles, after which stocks traded on the NYSE AMEX and NASDAQ were allocated into the same size groupings. This same methodology was used to split the 10th decile into four parts: 10w, 10x (sub-portfolios of 10a), and 10y, and 10z (sub-portfolios of 10b). Splitting the 10th decile into 10a and 10b is equivalent to breaking the stocks

down into 20 size groupings, with portfolios 19 and 20 representing 10a and 10b. Further splitting 10a into 10w and 10x and 10b into 10y and 10z is equivalent to breaking the stocks down into 40 size groupings, with portfolios 37 and 38 representing 10w and 10x, and portfolios 39 and 40 representing 10y and 10z.

Table 7-7 shows that the pattern continues; as companies get smaller their size premium increases. There is a noticeable increase in size premium from 10a to 10b, and the portfolio made up of the smallest companies, 10z, has the largest size premium, which is demonstrated visually in Graph 7-3. This can be useful information in valuing companies that are extremely small. Table 7-6 presents the size, composition, and breakpoints of each size category. First, the recent number of companies and total decile market capitalization are presented for each of the portfolios. Then the market capitalization and name of the largest company is presented. Breaking the smallest decile down lowers the significance of the results compared to results for the 10th decile taken as a whole, however. There are always going to be more companies included in the Micro-cap than in the 10th decile, and more companies in the 10th decile than in the 10b category. The more stocks included in a sample, the more significance can be placed on the results. The 10th decile gets as small as 49 companies back in March of 1926. This is still significant.

While this is not as much of a factor with the recent years of data, these size premia are constructed with data back to 1926. By breaking the 10th decile down into smaller components we have cut the number of stocks included in each group-ing. The change over time of the number of stocks included in the 10th decile for the NYSE/AMEX/NASDAQ is presented in Table 7-8. With fewer stocks included in the analysis early on, there is a strong possibility that just a few stocks can dominate the returns for those early years. While the number of companies included in the 10th decile for the early years of our analysis is low, it is not too low to demonstrate that the company size to size premia relationship continues to hold true, even when broken down into subdivisions 10a, 10w, 10x, 10b, 10y, and 10z.

All things considered, size premia developed for these portfolios are significant and can be used in cost of capital analysis. These size premia should greatly enhance the development of cost of capital analysis for very small companies.

Overlapping Size Categories

A common question among valuation practitioners is about how to use the various size premium metrics that Morningstar provides when size-based category breakpoints overlap. This issue is magnified now that we have published even more granularity for the 10th decile.

There are going to be cases when the estimated equity value for a subject could categorize it in a number of size premium buckets. This range of potential size premium choices would have a tremendous effect on the firm's enterprise value. There are two decision paths when making this choice. The improper path is to choose the size premium that achieves the self-serving goal of influencing the enterprise value in the direction most desired. In many cases this leads to choosing the highest size premium number (12.06% in Table 7-7), because this will lead to the lowest enterprise value for tax purposes, marital dissolution, acquisition valuation, etc. The proper path is to choose the size premium that is most statistically relevant for your application.

Choosing the Right Size Premium

There are two primary factors in determining which size premium to use. First, identify how close to a size category boundary your subject company falls. Second, determine how confident you are in your estimate of equity value.

Let's say you have an example where the estimated equity value is close to the top breakpoint of the 10b category, toward the middle of the 10th decile, and toward the bottom of the Micro-cap. In this case, the statistically conservative choice is the 10th decile. We need to balance the confidence that our subject firm actually falls within a particular size category with the need to tailor that size grouping as tight as possible to make the peers relevant to our analysis. The Micro-cap category is too broad for this case, since the subject firm falls in the lower range of the category, and 10b is too narrow since our subject company would barely squeeze in under the top breakpoint before sliding into 10a. We can say with confidence that the 10th decile puts our company among the most peers of similar size.

Since estimating equity value for the purpose of size premium categorization is a circular challenge, it makes sense to use as many quality metrics that are available to perform this estimate. In doing so, you may find that the equity estimates cross a number of size premium categories. In this case, it is advisable to sacrifice granularity for statistical confidence. For example, if you have three equity estimates indicating that your firm would fall in the middle of 10x, bottom of 10x, and middle of 10y categories, the overall 10th decile size premium would be the best category to capture the size of similar peer companies while acknowledging that the imperfections and circular nature of the size bucketing process.

Table 7-7: Long-Term Returns in Excess of CAPM Estimation for Decile Portfolios of the NYSE/AMEX/NASDAQ, with 10th Decile Split

	Beta*	Arithmetic Mean Return (%)	Realized Return in Excess of Riskless Rate** (%)	Estimated Return in Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1	0.91	10.90	5.72	6.09	-0.37
2	1.03	12.81	7.64	6.90	0.74
3	1.10	13.36	8.18	7.33	0.85
4	1.12	13.82	8.65	7.50	1.15
5	1.16	14.59	9.41	7.72	1.69
6	1.18	14.81	9.63	7.90	1.73
7	1.24	15.19	10.01	8.28	1.73
8	1.30	16.33	11.15	8.67	2.49
9	1.35	17.01	11.84	8.99	2.85
10a	1.42	19.10	13.92	9.47	4.45
10w	1.39	18.33	13.15	9.30	3.85
10x	1.45	19.78	14.60	9.69	4.91
10b	1.38	24.39	19.21	9.20	10.01
10y	1.40	23.58	18.40	9.35	9.05
10z	1.35	26.23	21.05	8.99	12.06
Mid-Cap, 3-5	1.12	13.71	8.54	7.45	1.08
Low-Cap, 6-8	1.23	15.20	10.03	8.18	1.85
Micro-Cap, 9-10	1.36	18.23	13.06	9.07	3.99

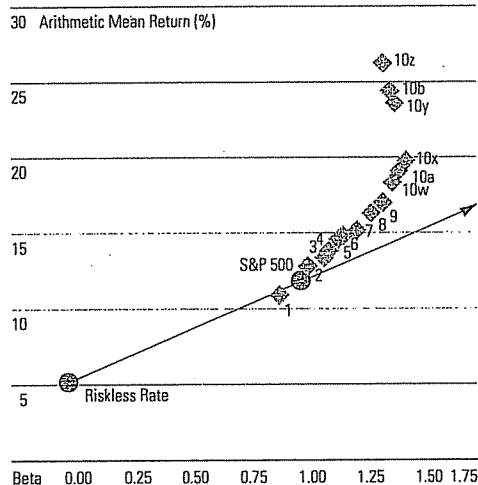
Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*Betas are estimated from monthly portfolio total returns in excess of the 30-day U.S. Treasury bill total return versus the S&P 500 total returns in excess of the 30-day U.S. Treasury bill, January 1926–December 2009.

**Historical riskless rate is measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18 percent).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.85 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

Graph 7-3: Security Market Line versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ, with 10th Decile Split



Data from 1926–2009.

Table 7-8: Historical Number of Companies for NYSE/AMEX/NASDAQ Decile 10

Sept.	Number of Companies
1926	52*
1930	72
1940	78
1950	100
1960	109
1970	865
1980	685
1990	1,814
2000	1,927
2005	1,746
2006	1,744
2007	1,775
2008	1,626
2009	1,777

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*The fewest number of companies was 49 in March, 1926

Alternative Methods of Calculating the Size Premia

The size premia estimation method presented above makes several assumptions with respect to the market benchmark and the measurement of beta. The impact of these assumptions can best be examined by looking at some alternatives. In this section we will examine the impact on the size premia of using a different market benchmark for estimating the equity risk premia and beta. We will also examine the effect on the size premia study of using sum beta or an annual beta.⁵

Changing the Market Benchmark

In the original size premia study, the S&P 500 is used as the market benchmark in the calculation of the realized historical equity risk premium and of each size group's beta. The NYSE total value-weighted index is a common alternative market benchmark used to calculate beta. Table 7-9 uses this market benchmark in the calculation of beta. In order to isolate the size effect, we require an equity risk premium based on a large company stock benchmark. The NYSE deciles 1–2 large company index offers a mutually exclusive set of portfolios for the analysis of the smaller company groups: mid-cap deciles 3–5, low-cap deciles 6–8, and micro-cap deciles 9–10. The size premia analyses using these benchmarks are summarized in Table 7-9 and depicted graphically in Graph 7-4.

Table 7-9: Long-Term Returns in Excess of CAPM Estimation for Decile Portfolios of the NYSE/AMEX/NASDAQ, with NYSE Market Benchmarks

	Beta*	Arithmetic Mean Return (%)	Realized Return in Excess of Riskless Rate** (%)	Estimated Return in Excess of Riskless Rate [†] (%)	Size Premium (Return in Excess of CAPM) (%)
1	0.99	10.90	5.72	5.84	-0.13
2	1.11	12.81	7.64	6.59	1.05
3	1.17	13.36	8.18	6.95	1.24
4	1.20	13.82	8.65	7.12	1.53
5	1.23	14.59	9.41	7.29	2.12
6	1.26	14.81	9.63	7.45	2.18
7	1.32	15.19	10.01	7.81	2.20
8	1.38	16.33	11.15	8.17	2.98
9	1.42	17.01	11.84	8.44	3.39
10	1.48	20.85	15.68	8.79	6.89
Mid-Cap, 3-5	1.19	13.71	8.54	7.06	1.48
Low-Cap, 6-8	1.30	15.20	10.03	7.71	2.32
Micro-Cap, 9-10	1.43	18.23	13.06	8.50	4.55

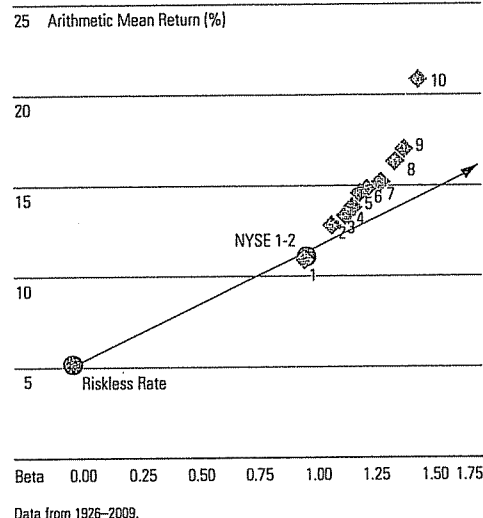
Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*Betas are estimated from monthly portfolio total returns in excess of the 30-day U.S. Treasury bill total return versus the CRSP Deciles 1–2 total returns in excess of the 30-day U.S. Treasury bill, January 1926–December 2009.

**Historical riskless rate is measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18 percent).

[†]Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the CRSP Deciles 1–2 (11.10 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

Graph 7-4: Security Market Line versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ, with NYSE Market Benchmarks



For the entire period analyzed, 1926–2009, the betas obtained using the NYSE total value-weighted index are higher than those obtained using the S&P 500. Since smaller companies had higher betas using the NYSE benchmark, one would expect the size premia to shrink. However, as was illustrated in Chapter 5, the equity risk premium calculated using the NYSE deciles 1–2 benchmark results in a value of 5.93, as opposed to 6.67 when using the S&P 500. The effect of the higher betas and lower equity risk premium cancel each other out, and the resulting size premia in Table 7-9 are slightly higher than those resulting from the original study.

Measuring Beta with Sum Beta

The sum beta method attempts to provide a better measure of beta for small stocks by taking into account their lagged price reaction to movements in the market. [See Chapter 6.] Table 7-10 shows that using this method of beta estimation results in larger betas for the smaller size deciles of the NYSE/AMEX/NASDAQ while those of the larger size deciles remain relatively stable. From these results, it appears that the sum beta method corrects for possible errors that are made when estimating small company betas without adjusting for the lagged price reaction of small stocks. However, the sum beta, when applied to the CAPM, still does not account for all of the returns in excess of the riskless rate historically found for small stocks. Table 7-10

demonstrates that a size premium is still necessary to estimate the expected returns using sum beta in conjunction with the CAPM, though the premium is smaller than that needed when using the typical calculation of beta.

Graph 7-5 compares the 10 deciles of the NYSE/AMEX/NASDAQ to the security market line. There are two sets of decile portfolios—one set is plotted using the single variable regression method of calculating beta, as in Graph 7-2, and the second set uses the sum beta method. The portfolios plotted using sum beta more closely resemble the security market line. Again, this demonstrates that the sum beta method results in the desired effect: a higher estimate of returns for small companies. Yet the smaller portfolios still lie above the security market line, indicating that an additional premium may be required.

Table 7-10: Long-Term Returns in Excess of CAPM Estimation for Decile Portfolios of the NYSE/AMEX/NASDAQ, with Sum Beta

	Beta*	Arithmetic Mean Return (%)	Realized Return in Excess of Riskless Rate** (%)	Estimated Return in Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1-Largest	0.91	10.90	5.72	6.08	-0.36
2	1.06	12.81	7.64	7.04	0.59
3	1.13	13.36	8.18	7.55	0.64
4	1.20	13.82	8.65	8.00	0.65
5	1.24	14.59	9.41	8.25	1.17
6	1.30	14.81	9.63	8.66	0.96
7	1.38	15.19	10.01	9.21	0.80
8	1.49	16.33	11.15	9.97	1.19
9	1.56	17.01	11.84	10.38	1.46
10-Smallest	1.71	20.85	15.68	11.40	4.28
Mid-Cap, 3-5	1.17	13.71	8.54	7.81	0.73
Low-Cap, 6-8	1.36	15.20	10.03	9.10	0.93
Micro-Cap, 9-10	1.60	18.23	13.06	10.67	2.38

Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*Betas are estimated from monthly portfolio total returns in excess of the 30-day U.S. Treasury bill total return versus the S&P 500 total returns in excess of the 30-day U.S. Treasury bill, January 1926–December 2009.

**Historical riskless rate is measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18 percent).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.85 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

Standard & Poor's Ratings Services

Standard & Poor's CORPORATE RATINGS CRITERIA

STANDARD & POOR'S

CORPORATE RATINGS CRITERIA

Dear Reader,

This volume updates the 1994 edition of *Corporate Finance Criteria*. There are several new chapters, covering our recently introduced Bank Loan Ratings, criteria for "notching" junior obligations, and the role of cyclicity in ratings. Naturally, the ratio medians have been brought up to date.

Standard & Poor's criteria publications represent our endeavor to convey the thought processes and methodologies employed in determining Standard & Poor's ratings. They describe both the quantitative and qualitative aspects of the analysis. We believe that our rating product has the most value if users appreciate all that has gone into producing the letter symbols.

Bear in mind, though, that a rating is, in the end, an opinion. The rating experience is as much an art as it is a science.



Solomon B. Samson
Chairman, Corporate Ratings Criteria Committee

About photocopying or faxing *Corporate Ratings Criteria*. Reproducing or distributing *Corporate Ratings Criteria* without the consent of the publisher is prohibited. For information on discounted bulk rates, or our FAX services, please call (212) 208-1146.

Standard & Poor's

A Division of The McGraw-Hill Companies



Published by Standard & Poor's, a Division of The McGraw-Hill Companies. Executive offices: 1221 Avenue of the Americas, New York, N.Y. 10020. Editorial offices: 25 Broadway, New York, NY 10004. ISSN 1069-0778. Subscriber services: (212) 208-1146. Copyright 1996 by The McGraw-Hill Companies. All rights reserved. Officers of the McGraw-Hill Companies: Joseph L. Dionne, Chairman and Chief Executive Officer; Harold W. McGraw, III, President and Chief Operating Officer; Robert N. Landes, Senior Executive Vice President and Secretary; Kenneth M. Vittor, Senior Vice President and General Counsel; Frank Penglase, Senior Vice President, Treasury Operations. Information has been obtained by *Corporate Ratings Criteria* from sources believed to be reliable. However, because of the possibility of human or mechanical error by our sources, *Corporate Ratings Criteria* does not guarantee the accuracy, adequacy, or completeness of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information.

Standard & Poor's receives compensation for rating debt obligations. Such compensation is based on the time and effort to determine the rating and is normally paid either by the issuers of such securities or by the underwriters participating in the distribution thereof. The fees generally vary from \$2,500 to \$50,000. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscription to its publications.

STANDARD & POOR'S RATINGS SERVICES

President Leo C. O'Neill

Executive Vice Presidents

Hendrik J. Kranenburg Robert E. Maitner

Executive Managing Directors

Edward Z. Emmer, *Corporate Finance Ratings*

Clifford M. Griep, *Financial Institutions Ratings*

Vladimir Stadnyk, *Public Finance Ratings*

Roy N. Taub, *Insurance Ratings*

Vickie A. Tillman, *Structured Finance Ratings*

Joanne W. Rose, *Senior Managing Director*

General Counsel

Glenn S. Goldberg, *Managing Director,*
Ratings Development & Communications

RATINGS INFORMATION SERVICES

Senior Vice President Jeffrey R. Paterson

Vice President Robert Frump

Product Manager Olga B. Sciortino

Marketing Specialist Suzanne Ferrufino

Managing Editor Linda Saul

Editorial Managers Irene Coleman

Rachel L. Gordon

Steve D. Homan

Copy Editor Peter Dinolfo

PRODUCTION

Director of Design, Production
& Manufacturing Laurel Bernstein

DESKTOP PUBLISHING

Manager, Production Operations Randi Bender

Production Manager Barry Ritz

Production Coordinators Harvey Aronson

Alicia Jones

Elise Lichterman

Senior Production Assistants Laurie Joachim

Lisa Morano, *Copy Editor*

Stephen Williams

DESIGN

Manager, Art & Design Sara Burris

Senior Designers Claudia Baudo

Donelle Sawyer

Designer Giulia Fini

Junior Designer Heidi Weinberg

TECHNOLOGY & DEVELOPMENT

Senior Production Manager Edward Hanapole

Production Manager Theodore Perez

Senior Production Assistant Jason Rock

SALES

Vice President Sarah Ferguson

Director, Global Sales George Schepp

Sales Managers Steve Flaws, *Europe*

Michael Naylor, *Asia-Pacific*

Customer Service Manager Robert Baumohl

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

Utilities

The utilities rating methodology encompasses two basic components: business risk analysis and financial analysis. Evaluation of industry characteristics, the utility's position within that industry, its regulation, and its management provides the context for assessing a firm's financial condition.

Historical analysis is a tool for identifying strengths and weaknesses, and provides a starting point for evaluating financial condition. Business position assessment is the qualitative measure of a utility's fundamental creditworthiness. It focuses on the forces that will shape the utilities' future.

Utilities credit analysis factors

Business risk

- Markets and service area economy
- Competitive position
- Operations
- Regulation
- Management
- Fuel, power, and water supply
- Asset concentration

Financial risk

- Earnings protection
- Capital structure
- Cash flow adequacy
- Financial flexibility/capital attraction

The credit analysis of utilities is quickly evolving, as utilities are treated less as regulated monopolies and more as entities faced with a host of challengers in a competitive environment. Marketplace dynamics are supplanting the power of regulation, making it critically important to reduce costs and/or market new services in order to thwart competitors' inroads.

Markets and service area economy

Assessing service territory begins with the economic and demographic evaluation of the area in which the utility has its franchise. Strength of long-term demand for the product is examined from a macroeconomic perspective. This enables Standard & Poor's to evaluate the affordability of rates and the staying power of demand.

Standard & Poor's tries to discern any secular consumption trends and, more importantly, the reasons for them. Specific items examined include the size and growth rate of the market, strength of the franchise, historical and projected sales growth, income levels and trends in population, employment, and per capita income. A utility with a healthy economy and customer base—as illustrated by diverse employment opportunities, average or above-average wealth and income statistics, and low unemployment—will have a greater capacity to support its operations.

ment—will have a greater capacity to support its operations.

For electric and gas utilities, distribution by customer class is scrutinized to assess the depth and diversity of the utility's customer mix. For example, heavy industrial concentration is viewed cautiously, since a utility may have significant exposure to cyclical volatility. Alternatively, a large residential component yields a stable and more predictable revenue stream. The largest utility customers are identified to determine their importance to the bottom line and assess the risk of their loss and potential adverse effect on the utility's financial position. Credit concerns arise when individual customers represent more than 5% of revenues. The company or industry may play a significant role in the overall economic base of the service area. Moreover, large customers may turn to cogeneration or alternative power supplies to meet their energy needs, potentially leading to reduced cash flow for the utility (even in cases where a large customer pays discounted rates and is not a profitable account for the utility). Customer concentration is less significant for water and telecommunication utilities.

Competitive position

As competitive pressures have intensified in the utilities industry, Standard & Poor's analysis has deepened to include a more thorough review of competitive position.

Electric utility competition

For electric utilities, competitive factors examined include: percentage of firm wholesale revenues that are most vulnerable to competition; industrial load concentration; exposure of key customers to alternative suppliers; commercial concentrations; rates for various customer classes; rate design and flexibility; production costs, both marginal and fixed; the regional capacity situation; and transmission constraints. A regional focus is evident, but high costs and rates relative to national averages are also of significant concern because of the potential for electricity substitutes over time.

Mounting competition in the electric utility industry derives from excess generating capacity, lower barriers to entering the electric generating business, and marginal costs that are below embedded costs. Standard & Poor's has already witnessed declining prices in wholesale markets, as *de facto* retail competition is already being seen in several parts of the country. Standard & Poor's believes that over the coming years more and more customers will want and demand lower prices. Initial concerns focus on the largest industrial loads, but other customer classes will be increasingly vulnerable. Competition will not necessar-

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

ily be driven by legislation. Other pressures will arise from global competition and improving technologies, whether it be the declining cost of incremental generation or advances in transmission capacity or substitute energy sources like the fuel cell. It is impossible to say precisely when wide-open retail competition will occur; this will be evolutionary. However, significantly greater competition in retail markets is inevitable.

Gas utility competition

Similarly, gas utilities are analyzed with regard to their competitive standing in the three major areas of demand: residential, commercial, and industrial. Although regulated as holders of monopoly power, natural gas utilities have for some time been actively competing for energy market share with fuel oil, electricity, coal, solar, wood, etc. The long-term staying power of market demand for natural gas cannot be taken for granted. In fact, as the electric utility industry restructures and reduces costs, electric power will become more cost competitive and threaten certain gas markets. In addition, independent gas marketers have made greater inroads behind the city gate and are competing for large gas users. Moreover, the recent trend by state regulators to unbundle utility services is creating opportunities for outsiders to market niche products. Distributors still have the upper hand, but those who do not reduce and control costs, and thus rates, could find competition even more difficult.

Natural gas pipelines are judged to carry a somewhat higher business risk than distribution companies because they face competition in every one of their markets. To the extent a pipeline serves utilities versus industrial end users, its stability is greater. Over the next five years, pipeline competition will heat up since many service contracts with customers are expiring. Most distributor or end-use customers are looking to reduce pipeline costs and are working to improve their load factor to do so. Thus, pipelines will likely find it difficult to recontract all capacity in coming years. Being the pipeline of choice is a function of attractive transportation rates, diversity and quality of services provided, and capacity available in each particular market. In all cases though, periodic discounting of rates to retain customers will occur and put pressure on profitability.

Water utility competition

As the last true utility monopoly, water utilities face very little competition and there is currently no challenge to the continuation of franchise areas. The only exceptions have been cases where investor-owned water companies have been subject to condemnation and municipalization because of poor service or political motivations. In that regard, Standard & Poor's pays close attention to costs and rates in relation to neighboring utilities and national averages. (In contrast, the privatization of public water facilities has begun, albeit at a slower pace than anticipated. This is occurring mostly in the form of operating contracts and public/private partnerships, and not in asset transfers. This trend should continue as cities look for ways to bal-

ance their tight budgets.) Also, water utilities are not fully immune to the forces of competition; in a few instances wholesale customers can access more than one supplier.

Telephone competition

The Telecommunications Act of 1996 accelerates the continuing challenge to the local exchange companies' (LECs) century-old monopoly in the local loop. Competitive access providers (CAPs), both facilities-based and resellers, are aggressively pursuing customers, generally targeting metropolitan areas, and promising lower rates and better service.

Most long-distance calls are still originated and terminated on the local telephone company network. To complete such a call, the long-distance provider (including AT&T, MCI, Sprint and a host of smaller interexchange carriers or "IXCs") must pay the local telephone company a steep "access" fee to compensate the local phone company for the use of its local network. CAPs, in contrast, build or lease facilities that directly connect customers to their long-distance carrier, bypassing the local telephone company and avoiding access fees, and thereby can offer lower long-distance rates. But the LECs are not standing still; they are combating the loss of business to CAPs by lowering access fees, thereby reducing the economic incentive for a high usage long-distance customer to use a CAP. LECs are attempting to make up for the loss of revenues from lower access fees by increasing basic local service rates (or at least not lowering them), since basic service is far less subject to competition. LECs are improving operating efficiency and marketing high margin, value-added new services. Additionally, in the wake of the Telecommunications Act, LECs will capture at least some of the inter-LATA long-distance market. As a result of these initiatives, LECs continue to rebuild themselves—from the traditional utility monopoly to leaner, more marketing oriented organizations.

While LECs, and indeed all segments of the telecommunications sector, face increasing competition, there are favorable industry factors that tend to offset heightened business risk and auger for overall ratings stability for most LECs. Importantly, telecommunications is a declining-cost business. With increased deployment of fiber optics, the cost of transport has fallen dramatically and digital switching hardware and software have yielded more capable, trouble-free and cost-efficient networks. As a result, the cost of network maintenance has dropped sharply, as illustrated by the ratio of employees per 10,000 access lines, an oft cited measurement of efficiency. Ratios as low as 25 employees per 10,000 lines are being seen, down from the typical 40 or more employees per 10,000 ratio of only a few years ago.

In addition, networks are far more capable. They are increasingly digitally switched and able to accommodate high-speed communications. The infrastructure needed to accommodate switched broadband services will be built into telephone networks over the next few years. These advanced networks will enable telephone companies to look to a greater variety of high-margin, value-added serv-

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

ices. In addition to those current services such as call waiting or caller ID, the delivery of hundreds of broadcast and interactive video channels will be possible. While these services offer the potential of new revenue streams, they will simultaneously present a formidable challenge. LECs will be entering the new (to them) arena of multimedia entertainment and will have to develop expertise in marketing and entertainment programming acumen; such skills stand in sharp contrast to LECs' traditional strengths in engineering and customer service.

Operations

Standard & Poor's focuses on the nature of operations from the perspective of cost, reliability, and quality of service. Here, emphasis is placed on those areas that require management attention in terms of time or money and which, if unresolved, may lead to political, regulatory, or competitive problems.

Operations of electric utilities

For electric utilities, the status of utility plant investment is reviewed with regard to generating plant availability and utilization, and also for compliance with existing and contemplated environmental and other regulatory standards. The record of plant outages, equivalent availability, load factors, heat rates, and capacity factors are examined. Also important is efficiency, as defined by total megawatt hour per employee and customers per employee. Transmission interconnections are evaluated in terms of the number of utilities to which the utility in question has access, the cost structures and available generating capacity of these other utilities, and the price paid for wholesale power.

Because of mounting competition and the substantial escalation in decommissioning estimates, significant weight is given to the operation of nuclear facilities. Nuclear plants are becoming more vulnerable to high production costs that make their rates uneconomic. Significant asset concentration may expose the utility to poor performance, unscheduled outages or premature shutdowns, and large deferrals or regulatory assets that may need to be written off for the utility to remain competitive. Also, nuclear facilities tend to represent significant portions of their operators' generating capability and assets. The loss of a productive nuclear unit from both power supply and rate base can interrupt the revenue stream and create substantial additional costs for repairs and improvements and replacement power. The ability to keep these stations running smoothly and economically directly influences the ability to meet electric demand, the stability of revenues and costs, and, by extension, the ability to maintain adequate creditworthiness. Thus, economic operation, safe operation, and long-term operation are examined in depth. Specifically, emphasis is placed on operation and maintenance costs, busbar costs, fuel costs, refueling outages, forced outages, plant statistics, NRC evaluations, the potential need for repairs, operating licenses, decommissioning estimates and amounts held in external trusts, spent fuel storage capacity, and management's nuclear experi-

ence. In essence, favorable nuclear operations offer significant opportunities but, if a nuclear unit runs poorly or not at all, the attendant risks can be great.

Operations of gas utilities

For gas pipeline and distribution companies, the degree of plant utilization, the physical condition of the mains and lines, adequacy of storage to meet seasonal needs, "lost and unaccounted for" gas levels, and per-unit nongas operating and construction costs are important factors. Efficiency statistics such as load factor, operating costs per customer, and operating income per employee are also evaluated in comparison to other utilities and the industry as a whole.

Operations of water utilities

As a group, water utilities are continually upgrading their physical plant to satisfy regulations and to develop additional supply. Over the next decade, water systems will increasingly face the task of maintaining compliance, as drinking water regulations change and infrastructure ages. Given that the Safe Drinking Water Act was authorized in 1974, the first generation of treatment plants built to conform with these rules are almost 20 years old. Additionally, because the focus during this period was on satisfying environmental standards, deferred maintenance of distribution systems has been common, especially in older urban areas. The increasing cost of supplying treated water argues against the high level of unaccounted for water witnessed in the industry. Consequently, Standard & Poor's anticipates capital plans for rebuilding distribution lines and major renewal and replacement efforts aimed at treatment plants.

Operations of telephone companies

For telephone companies, cost-of-service analysis focuses on plant capability and measures of efficiency and quality of service. Plant capability is ascertained by looking at such parameters as percentage of digitally switched lines; fiber optic deployment, in particular in those portions of the plant key to network survival; and the degree of broadband capacity fiber and coaxial deployment and broadband switching capacity. Efficiency measures include operating margins, the ratio of employees per 10,000 access lines, and the extent of network and operations consolidation. Quality of service encompasses examination of quantitative measures, such as trouble reports and repeat service calls, as well as an assessment of qualitative factors, that may include service quality goals mandated by regulators.

Regulation

Regulatory rate-setting actions are reviewed on a case-by-case basis with regard to the potential effect on creditworthiness. Regulators' authorizing high rates of return is of little value unless the returns are earnable. Furthermore, allowing high returns based on noncash items does not benefit bondholders. Also, to be viewed positively, regulatory treatment should allow consistent performance from

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

period to period, given the importance of financial stability as a rating consideration.

The utility group meets frequently with commission and staff members, both at Standard & Poor's offices and at commission headquarters, demonstrating the importance Standard & Poor's places on the regulatory arena for credit quality evaluation. Input from these meetings and from review of rate orders and their impact weigh heavily in Standard & Poor's analysis.

Standard & Poor's does not "rate" regulatory commissions. State commissions typically regulate a number of diverse industries, and regulatory approaches to different types of companies often differ within a single regulatory jurisdiction. This makes it all but impossible to develop inclusive "ratings" for regulators.

Standard & Poor's evaluation of regulation also encompasses the administrative, judicial, and legislative processes involved in state and federal regulation. These can affect rate-setting activities and other aspects of the business, such as competitive entry, environmental and safety rules, facility siting, and securities sales.

As the utility industry faces an increasingly deregulated environment, alternatives to traditional rate-making are becoming more critical to the ability of utilities to effectively compete, maintain earnings power, and sustain creditor protection. Thus, Standard & Poor's focuses on whether regulators, both state and federal, will help or hinder utilities as they are exposed to greater competition. There is much that regulators can do, from allocating costs to more captive customers to allowing pricing flexibility—and sometimes just stepping out of the way.

Under traditional rate-making, rates and earnings are tied to the amount of invested capital and the cost of capital. This can sometimes reward companies more for justifying costs than for containing them. Moreover, most current regulatory policies do not permit utilities to be flexible when responding to competitive pressures of a deregulated market. Lack of flexible tariffs for electric utilities may lure large customers to wheel cheaper power from other sources.

In general, a regulatory jurisdiction is viewed favorably if it permits earning a return based on the ability to sustain rates at competitive levels. In addition to performance-based rewards or penalties, flexible plans could include market-based rates, price caps, index-based prices, and rates premised on the value of customer service. Such rates more closely mirror the competitive environment that utilities are confronting.

Electric industry regulation

The ability to enter into long-term arrangements at negotiated rates without having to seek regulatory approval for each contract is also important in the electric industry. (While contracting at reduced rates constrains financial performance, it lessens the potential adverse impact in the event of retail wheeling. Since revenue losses associated with this strategy are not likely to be recovered from rate-payers, utilities must control costs well enough to remain

competitive if they are to sustain current levels of bondholder protection.)

Natural gas industry regulation

In the gas industry, too, several state commission policies weigh heavily in the evaluation of regulatory support. Examples include stabilization mechanisms to adjust revenues for changes in weather or the economy, rate and service unbundling decisions, revenue and cost allocation between sales and transportation customers, flexible industrial rates, and the general supportiveness of construction costs and gas purchases.

Water industry regulation

In all water utility activities, federal and state environmental regulations continue to play a critical role. The legislative timetable to effect the 1986 amendments to the Safe Drinking Water Act of 1974 was quite aggressive. But environmental standards-setting has actually slowed over the past couple of years due largely to increasing sentiment that the stringent, costly standards have not been justified on the basis of public health. A moratorium on the promulgation of significant new environmental rules is anticipated.

Telecommunications industry regulation

Despite the advances in telecommunications deregulation, analysis of regulation of telephone operators will continue to be a key rating determinant for the foreseeable future. The method of regulation may be either classic rate-based rate of return or some form of price cap mechanism. The most important factor is to assess whether the regulatory framework—no matter which type—provides sufficient financial incentive to encourage the rated company to maintain its quality of service and to upgrade its plant to accommodate new services while facing increasing competition from wireless operators and cable television companies.

Where regulators do still set tariffs based on an authorized return, Standard & Poor's strives to explore with regulators their view of the rate-of-return components that can materially impact reported versus regulatory earnings. Specifically these include the allowable base upon which the authorized return can be earned, allowable expenses, and the authorized return. Since regulatory oversight runs the gamut from strict, adversarial relationships with the regulated operating companies to highly supportive postures, Standard & Poor's probes beyond the apparent regulatory environment to ascertain the actual impact of regulation on the rated company.

Management

Evaluating the management of a utility is of paramount importance to the analytical process since management's abilities and decisions affect all areas of a company's operations. While regulation, the economy, and other outside factors can influence results, it is ultimately the quality of management that determines the success of a company.

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

With emerging competition, utility management will be more closely scrutinized by Standard & Poor's and will become an increasingly critical component of the credit evaluation. Management strategies can be the key determinant in differentiating utilities and in establishing where companies lie on the business position spectrum. It is imperative that managements be adaptable, aggressive, and proactive if their utilities are to be viable in the future; this is especially important for utilities that are currently uncompetitive.

The assessment of management is accomplished through meetings, conversations, and reviews of company plans. It is based on such factors as tenure, industry experience, grasp of industry issues, knowledge of customers and their needs, knowledge of competitors, accounting and financing practices, and commitment to credit quality. Management's ability and willingness to develop workable strategies to address their systems' needs, to deal with the competitive pressures of free market, to execute reasonable and effective long-term plans, and to be proactive in leading their utilities into the future are assessed. Management quality is also indicated by thoughtful balancing of public and private priorities, a record of credibility, and effective communication with the public, regulatory bodies, and the financial community. Boards of directors will receive ever more attention with respect to their role in setting appropriate management incentives.

With competition the watchword, Standard & Poor's also focuses on management's efforts to enhance financial condition. Management can bolster bondholder protection by taking any number of discretionary actions, such as selling common equity, lowering the common dividend payout, and paying down debt. Also important for the electric industry will be creativity in entering into strategic alliances and working partnerships that improve efficiency, such as central dispatching for a number of utilities or locking up at-risk customers through long-term contracts or expanded flexible pricing agreements. Proactive management teams will also seek alternatives to traditional rate-base, rate-of-return rate-making, move to adopt higher depreciation rates for generating facilities, segment customers by individual market preferences, and attempt to create superior service organizations.

In general, management's ability to respond to mounting competition and changes in the utility industry in a swift and appropriate manner will be necessary to maintain credit health.

Fuel, power, and water supply

Assessment of present and prospective fuel and power supply is critical to every electric utility analysis, while gauging the long-term natural gas supply position for gas pipeline and distribution companies and the water resources of a water utility is equally important. There is no similar analytical category for telephone utilities.

Electric utilities

For electric utilities emphasis is placed on generating

reserve margins, fuel mix, fuel contract terms, demand-side management techniques, and purchased power arrangements. The adequacy of generating margins is examined nationally, regionally, and for each individual company. However, the reserve margin picture is muddied by the imprecise nature of peak-load growth forecasting, and also supply uncertainty relating to such things as Canadian capacity availability and potential plant shut-downs due to age, new NRC rules, acid rain remedies, fuel shortages, problems associated with nontraditional technologies, and so forth. Even apparently ample reserves may not be what they seem. Moreover, the quality of capacity is just as important as the size of reserves. Companies' reserve requirements differ, depending upon individual operating characteristics.

Fuel diversity provides flexibility in a changing environment. Supply disruptions and price hikes can raise rates and ignite political and regulatory pressures that ultimately lead to erosion in financial performance. Thus, the ability to alter generating sources and take advantage of lower cost fuels is viewed favorably.

Dependence on any single fuel means exposure to that fuel's problems: electric utilities that rely on oil or gas face the potential for shortages and rapid price increases; utilities that own nuclear generating facilities face escalating costs for decommissioning; and coal-fired capacity entails environmental problems stemming from concerns over acid rain and the "greenhouse effect."

Buying power from neighboring utilities, qualifying facility projects, or independent power producers may be the best choice for a utility that faces increasing electricity demand. There has been a growing reliance on purchased power arrangements as an alternative to new plant construction. This can be an important advantage, since the purchasing utility avoids potential construction cost overruns as well as risking substantial capital. Also, utilities can avoid the financial risks typical of a multiyear construction program that are caused by regulatory lag and prudence reviews. Furthermore, purchased power may enhance supply flexibility, fuel resource diversity, and maximize load factors. Utilities that plan to meet demand projections with a portfolio of supply-side options also may be better able to adapt to future growth uncertainties. Notwithstanding the benefits of purchasing, such a strategy has risks associated with it. By entering into a firm long-term purchased power contract that contains a fixed-cost component, utilities can incur substantial market, operating, regulatory, and financial risks. Moreover, regulatory treatment of purchased power removes any upside potential that might help offset the risks. Utilities are not compensated through incentive rate-making; rather, purchased power is recovered dollar-for-dollar as an operating expense.

To analyze the financial impact of purchased power, Standard & Poor's first calculates the net present value of future annual capacity payments (discounted at 10%). This represents a potential debt equivalent—the off-balance-sheet obligation that a utility incurs when it enters into a long-term purchased power contract. However, Standard

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

& Poor's adds to the utility's balance sheet only a portion of this amount, recognizing that such a contractual arrangement is not entirely the equivalent of debt. What percentage is added is a function of Standard & Poor's qualitative analysis of the specific contract and the extent to which market, operating, and regulatory risks are borne by the utility (the risk factor). For unconditional, take-or-pay contracts, the risk factor range is from 40%-80%, with the average hovering around 60%. A lower risk factor is typically assigned for system purchases from coal-fired utilities and a higher risk factor is usually designated for unit-specific nuclear purchases. The range for take-and-pay performance obligations is between 10%-50%.

Gas utilities

For gas distribution utilities, long-term supply adequacy obviously is critical, but the supply role has become even more important in credit analysis since the Federal Energy Regulatory Commission's Order 636 eliminated the interstate pipeline merchant business. This thrust gas supply responsibilities squarely on local gas distributors. Standard & Poor's has always believed distributor management has the expertise and wherewithal to perform the job well, but the risks are significant since gas costs are such a large percentage of total utility costs. In that regard, it is important for utilities to get preapprovals of supply plans by state regulators or at least keep the staff and commissioners well informed. To minimize risks, a well-run program would diversify gas sources among different producers or marketers, different gas basins in the U.S. and Canada, and different pipeline routes. Also, purchase contracts should be firm, with minimal take-or-pay provisions, and have prices tied to an industry index. A modest percentage of fixed-price gas is not unreasonable. Contracts, whether of gas purchases or pipeline capacity, should be intermediate term. Staggering contract expirations (preferably annually) provides an opportunity to be an active market player. A modest degree of reliance on spot purchases provides flexibility, as does the use of market-based storage. Gas storage and on-property gas resources such as liquefied natural gas or propane air are effective peak-day and peak-season supply management tools.

Since pipeline companies no longer buy and sell natural gas and are just common carriers, connections with varied reserve basins and many wells within those basins are of great importance. Diversity of sources helps offset the risks arising from the natural production declines eventually experienced by all reserve basins and individual wells. Moreover, such diversity can enhance a pipeline's attractiveness as a transporter of natural gas to distributors and end users seeking to buy the most economical gas available for their needs.

Water utilities

Nearly all water systems throughout the U.S. have ample long-term water supplies. Yet to gain comfort, Standard & Poor's assesses the production capability of treatment plants and the ability to pump water from underground aquifers in relation to the usage demands from consumers.

Having adequate treated water storage facilities has become important in recent years and has helped many systems meet demands during peak summer periods. Of interest is whether the resources are owned by the utility or purchased from other utilities or local authorities. Owning properties with water rights provides more supply security. This is especially so in states like California where water allocations are being reduced, particularly since recent droughts and environmental issues have created alarm. Since the primary cost for water companies is treatment, it makes little difference whether raw water is owned or bought. In fact, compliance with federal and state water regulations is very high, and the overall cost to deliver treated water to consumers remains relatively affordable.

Asset concentration in the electric utility industry

In the electric industry, Standard & Poor's follows the operations of major generating facilities to assess if they are well managed or troubled. Significant dependence on one generating facility or a large financial investment in a single asset suggests high risk. The size or magnitude of a particular asset relative to total generation, net plant in service, and common equity is evaluated. Where substantial asset concentration exists, the financial profile of a company may experience wide swings depending on the asset's performance. Heavy asset concentration is most prevalent among utilities with costly nuclear units.

Earnings protection

In this category, pretax cash income coverage of all interest charges is the primary ratio. For this calculation, allowance for funds used during construction (AFUDC) is removed from income and interest expense. AFUDC and other such noncash items do not provide any protection for bondholders. To identify total interest expense, the analyst reclassifies certain operating expenses. The interest component of various off-balance-sheet obligations, such as leases and some purchased-power contracts, is included in interest expense. This provides the most direct indication of a utility's ability to service its debt burden.

While considerable emphasis in assessing credit protection is placed on coverage ratios, this measure does not provide the entire earnings protection picture. Also important are a company's earned returns on both equity and capital, measures that highlight a firm's earnings performance. Consideration is given to the interaction of embedded costs, financial leverage, and pretax return on capital.

Capital structure

Analyzing debt leverage goes beyond the balance sheet and covers quasi-debt items and elements of hidden financial leverage. Noncapitalized leases (including sale/lease-back obligations), debt guarantees, receivables financing, and purchased-power contracts are all considered debt equivalents and are reflected as debt in calculating capital

STANDARD & POOR'S CORPORATE RATINGS CRITERIA

structure ratios. By making debt level adjustments, the analyst can compare the degree of leverage used by each utility company.

Furthermore, assets are examined to identify undervalued or overvalued items. Assets of questionable value are discounted to more accurately evaluate asset protection.

Some firms use short-term debt as a permanent piece of their capital structure. Short-term debt also is considered part of permanent capital when it is used as a bridge to permanent financing. Seasonal, self-liquidating debt is excluded from the permanent debt amount, but this situation is rare—with the exception of certain gas utilities. Given the long life of almost all utility assets, short-term debt may expose these companies to interest-rate volatility, remarketing risk, bank line backup risk, and regulatory exposure that cannot be readily offset. The lower cost of shorter-term obligations (assuming a positively sloped yield curve) is a positive factor that partially mitigates the risk of interest-rate variability. As a rule of thumb, a level of short-term debt that exceeds 10% of total capital is cause for concern.

Similarly, if floating-rate debt and preferred stock constitute over one-third of total debt plus preferred stock, this level is viewed as unusually high and may be cause for concern. It might also indicate that management is aggressive in its financial policies.

A layer of preferred stock in the capital structure is usually viewed as equity—since dividends are discretionary and the subordinated claim on assets provides a cushion for providers of debt capital. A preferred component of up to 10% is typically viewed as a permanent wedge in the capital structure of utilities. However, as rate-of-return regulation is phased out, preferred stock may be viewed by utilities—as many industrial firms would—as a temporary option for companies that are not current taxpayers that do not benefit from the tax deductibility of interest. Even now, floating-rate preferred and money market perpetual preferred are problematic; a rise in the rate due to deteriorating credit quality tends to induce a company to take out such preferred stock with debt. Structures that convey tax deductibility to preferred stock have become very popular and do generally afford such financings with equity treatment.

Cash flow adequacy

Cash flow adequacy relates to a company's ability to generate funds internally relative to its needs. It is a basic component of credit analysis because it takes cash to pay expenses, fund capital spending, pay dividends, and make interest and principal payments. Since both common and preferred dividend payments are important to maintain capital market access, Standard & Poor's looks at cash flow measures both before and after dividends are paid.

To determine cash flow adequacy, several quantitative relationships are examined. Emphasis is placed on cash flow relative to debt, debt service requirements, and capital spending. Cash flow adequacy is evaluated with respect to a firm's ability to meet all fixed charges, including capacity payments under purchased-power contracts. Despite the conditional nature of some contracts, the purchaser is obligated to pay a minimum capacity charge. The ratio used is funds from operations plus interest and capacity payments divided by interest plus capacity payments.

Financial flexibility/capital attraction

Financing flexibility incorporates a utility's financing needs, plans, and alternatives, as well as its flexibility to accomplish its financing program under stress without damaging creditworthiness. External funding capability complements internal cash flow. Especially since utilities are so capital intensive, a firm's ability to tap capital markets on an ongoing basis must be considered. Debt capacity reflects all the earlier elements: earnings protection, debt leverage, and cash flow adequacy. Market access at reasonable rates is restricted if a reasonable capital structure is not maintained and the company's financial prospects dim. The analyst also reviews indenture restrictions and the impact of additional debt on covenant tests.

Standard & Poor's assesses a company's capacity and willingness to issue common equity. This is affected by various factors, including the market-to-book ratio, dividend policy, and any regulatory restrictions regarding the composition of the capital structure.

**STANDARD
& POOR'S**

RATINGSDIRECT®

May 27, 2009

Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

Primary Credit Analysts:

Solomon B Samson, New York (1) 212-438-7653; sol_samson@standardandpoors.com

Emmanuel Dubois-Pelerin, Paris (33) 1-4420-6673; emmanuel_dubois-pelerin@standardandpoors.com

Table Of Contents

Business Risk/Financial Risk Framework

Updated Matrix

Financial Benchmarks

How To Use The Matrix--And Its Limitations

Related Articles

Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

(Editor's Note: In the previous version of this article published on May 26, certain of the rating outcomes in the table 1 matrix were misspelled. A corrected version follows.)

Standard & Poor's Ratings Services is refining its methodology for corporate ratings related to its business risk/financial risk matrix, which we published as part of 2008 Corporate Ratings Criteria on April 15, 2008, on RatingsDirect at www.ratingsdirect.com and Standard & Poor's Web site at www.standardandpoors.com.

This article amends and supersedes the criteria as published in Corporate Ratings Criteria, page 21, and the articles listed in the "Related Articles" section at the end of this report.

This article is part of a broad series of measures announced last year to enhance our governance, analytics, dissemination of information, and investor education initiatives. These initiatives are aimed at augmenting our independence, strengthening the rating process, and increasing our transparency to better serve the global markets.

We introduced the business risk/financial risk matrix four years ago. The relationships depicted in the matrix represent an essential element of our corporate analytical methodology.

We are now expanding the matrix, by adding one category to both business and financial risks (see table 1). As a result, the matrix allows for greater differentiation regarding companies rated lower than investment grade (i.e., 'BB' and below).

Table 1

Business And Financial Risk Profile Matrix

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA	AA	A	A-	BBB	--
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+
Fair	--	BBB-	BB+	BB	BB-	B
Weak	--	--	BB	BB-	B+	B-
Vulnerable	--	--	--	B+	B	CCC+

These rating outcomes are shown for guidance purposes only. Actual rating should be within one notch of indicated rating outcomes.

The rating outcomes refer to issuer credit ratings. The ratings indicated in each cell of the matrix are the midpoints of a range of likely rating possibilities. This range would ordinarily span one notch above and below the indicated rating.

Criteria | Corporates | General: Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

Business Risk/Financial Risk Framework

Our corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; the financial analysis categories follow.

Our ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics can be rated very differently, to the extent that their business challenges and prospects differ. The categories underlying our business and financial risk assessments are:

Business risk

- Country risk
- Industry risk
- Competitive position
- Profitability/Peer group comparisons

Financial risk

- Accounting
- Financial governance and policies/risk tolerance
- Cash flow adequacy
- Capital structure/asset protection
- Liquidity/short-term factors

We do not have any predetermined weights for these categories. The significance of specific factors varies from situation to situation.

Updated Matrix

We developed the matrix to make explicit the rating outcomes that are typical for various business risk/financial risk combinations. It illustrates the relationship of business and financial risk profiles to the issuer credit rating.

We tend to weight business risk slightly more than financial risk when differentiating among investment-grade ratings. Conversely, we place slightly more weight on financial risk for speculative-grade issuers (see table 1, again). There also is a subtle compounding effect when both business risk and financial risk are aligned at extremes (i.e., excellent/minimal and vulnerable/highly leveraged.)

The new, more granular version of the matrix represents a refinement--not any change in rating criteria or standards--and, consequently, holds no implications for any changes to existing ratings. However, the expanded matrix should enhance the transparency of the analytical process.

Financial Benchmarks

Criteria | Corporates | General: Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

Table 2

Financial Risk Indicative Ratios (Corporates)			
	FFO/Debt (%)	Debt/EBITDA (x)	Debt/Capital (%)
Minimal	greater than 60	less than 1.5	less than 25
Modest	45-60	1.5-2	25-35
Intermediate	30-45	2-3	35-45
Significant	20-30	3-4	45-50
Aggressive	12-20	4-5	50-60
Highly Leveraged	less than 12	greater than 5	greater than 60

How To Use The Matrix--And Its Limitations

The rating matrix indicative outcomes are what we typically observe--but are not meant to be precise indications or guarantees of future rating opinions. Positive and negative nuances in our analysis may lead to a notch higher or lower than the outcomes indicated in the various cells of the matrix.

In certain situations there may be specific, overarching risks that are outside the standard framework, e.g., a liquidity crisis, major litigation, or large acquisition. This often is the case regarding credits at the lowest end of the credit spectrum--i.e., the 'CCC' category and lower. These ratings, by definition, reflect some impending crisis or acute vulnerability, and the balanced approach that underlies the matrix framework just does not lend itself to such situations.

Similarly, some matrix cells are blank because the underlying combinations are highly unusual--and presumably would involve complicated factors and analysis.

The following hypothetical example illustrates how the tables can be used to better understand our rating process (see tables 1 and 2).

We believe that Company ABC has a satisfactory business risk profile, typical of a low investment-grade industrial issuer. If we believed its financial risk were intermediate, the expected rating outcome should be within one notch of 'BBB'. ABC's ratios of cash flow to debt (35%) and debt leverage (total debt to EBITDA of 2.5x) are indeed characteristic of intermediate financial risk.

It might be possible for Company ABC to be upgraded to the 'A' category by, for example, reducing its debt burden to the point that financial risk is viewed as minimal. Funds from operations (FFO) to debt of more than 60% and debt to EBITDA of only 1.5x would, in most cases, indicate minimal.

Conversely, ABC may choose to become more financially aggressive--perhaps it decides to reward shareholders by borrowing to repurchase its stock. It is possible that the company may fall into the 'BB' category if we view its financial risk as significant. FFO to debt of 20% and debt to EBITDA 4x would, in our view, typify the significant financial risk category.

Still, it is essential to realize that the financial benchmarks are guidelines, neither gospel nor guarantees. They can vary in nonstandard cases: For example, if a company's financial measures exhibit very little volatility, benchmarks may be somewhat more relaxed.

Criteria | Corporates | General: Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios. It encompasses:

- a view of accounting and disclosure practices;
- a view of corporate governance, financial policies, and risk tolerance;
- the degree of capital intensity, flexibility regarding capital expenditures and other cash needs, including acquisitions and shareholder distributions; and
- various aspects of liquidity--including the risk of refinancing near-term maturities.

The matrix addresses a company's standalone credit profile, and does not take account of external influences, which would pertain in the case of government-related entities or subsidiaries that in our view may benefit or suffer from affiliation with a stronger or weaker group. The matrix refers only to local-currency ratings, rather than foreign-currency ratings, which incorporate additional transfer and convertibility risks. Finally, the matrix does not apply to project finance or corporate securitizations.

Related Articles

Industrials' Business Risk/Financial Risk Matrix--A Fundamental Perspective On Corporate Ratings, published April 7, 2005, on RatingsDirect.

Copyright © 2009, Standard & Poors, a division of The McGraw-Hill Companies, Inc. (S&P). S&P and/or its third party licensors have exclusive proprietary rights in the data or information provided herein. This data/information may only be used internally for business purposes and shall not be used for any unlawful or unauthorized purposes. Dissemination, distribution or reproduction of this data/information in any form is strictly prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P, its affiliates or its third party licensors, S&P, its affiliates and its third party licensors do not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall S&P, its affiliates and its third party licensors be liable for any direct, indirect, special or consequential damages in connection with subscribers or others use of the data/information contained herein. Access to the data or information contained herein is subject to termination in the event any agreement with a third-party of information or software is terminated.

Analytic services provided by Standard & Poor's Ratings Services (Ratings Services) are the result of separate activities designed to preserve the independence and objectivity of ratings opinions. The credit ratings and observations contained herein are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services. Standard & Poor's has established policies and procedures to maintain the confidentiality of non-public information received during the ratings process.

Ratings Services receives compensation for its ratings. Such compensation is normally paid either by the issuers of such securities or third parties participating in marketing the securities. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Any Passwords/user IDs issued by S&P to users are single user-dedicated and may ONLY be used by the individual to whom they have been assigned. No sharing of passwords/user IDs and no simultaneous access via the same password/user ID is permitted. To reprint, translate, or use the data or information other than as provided herein, contact Client Services, 55 Water Street, New York, NY 10041; (1)212.438.7280 or by e-mail to: research_request@standardandpoors.com.

Proxy Group of Six AUS Utility Reports Water Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2005 - 2009, INCLUSIVE

	2009	2008	2007	2006	2005
(MILLIONS OF DOLLARS)					
CAPITALIZATION STATISTICS					
AMOUNT OF CAPITAL EMPLOYED					
TOTAL PERMANENT CAPITAL	\$783,073	\$702,825	\$678,457	\$617,011	\$555,497
SHORT-TERM DEBT	\$38,790	\$39,873	\$18,305	\$26,067	\$30,258
TOTAL CAPITAL EMPLOYED	\$821,863	\$742,698	\$696,762	\$643,078	\$585,755
INDICATED AVERAGE CAPITAL COST RATES (2)					
TOTAL DEBT	5.01 %	5.47 %	5.93 %	6.20 %	5.92 %
PREFERRED STOCK	5.54	5.44	5.20	5.12	5.05
CAPITAL STRUCTURE RATIOS					
BASED ON TOTAL PERMANENT CAPITAL:					5 YEAR AVERAGE
LONG-TERM DEBT	49.43 %	48.95 %	49.03 %	47.81 %	50.53 %
PREFERRED STOCK	0.27	0.28	0.41	0.42	0.37
COMMON EQUITY	50.30	50.77	50.56	51.77	48.99
TOTAL	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
BASED ON TOTAL CAPITAL:					
TOTAL DEBT, INCLUDING SHORT-TERM	52.89 %	52.27 %	50.40 %	49.03 %	52.43 %
PREFERRED STOCK	0.23	0.26	0.40	0.42	0.36
COMMON EQUITY	46.88	47.47	49.20	50.55	47.10
TOTAL	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
FINANCIAL STATISTICS					
FINANCIAL RATIOS - MARKET BASED					
EARNINGS / PRICE RATIO	4.95 %	4.72 %	4.24 %	3.96 %	4.80 %
MARKET / AVERAGE BOOK RATIO	184.85	193.12	222.65	233.68	226.88
DIVIDEND YIELD	3.77	3.64	3.25	3.27	3.47
DIVIDEND PAYOUT RATIO	74.52	75.54	74.47	80.58	75.09
RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY					
	9.09 %	9.06 %	9.19 %	8.78 %	9.92 %
TOTAL DEBT / EBITDA (3)					
	4.77 X	4.44 X	4.15 X	4.42 X	4.35 X
FUNDS FROM OPERATIONS / TOTAL DEBT (4)					
	16.23 %	17.05 %	15.83 %	16.15 %	15.93 %
TOTAL DEBT / TOTAL CAPITAL	52.89 %	52.27 %	50.40 %	49.03 %	52.43 %
					51.40 %

See Page 2 for notes.

Proxy Group of Six AUS Utility Reports Water Companies
Capitalization and Financial Statistics
2005-2009, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
- (2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
- (3) Total debt as a percentage of EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
- (4) Funds from operations (as defined in Note 3) as a percentage of total debt.

Selection Criteria:

The basis of selection was to include those water companies: 1) which are included in the Water Company Group of AUS Utility Reports (April 2010); 2) which have Value Line five-year EPS growth rate projections or Reuters consensus five-year EPS growth rate projections; 3) which have positive Value Line five-year DPS growth rate projections; 4) which have a Value Line adjusted beta as published in Value Line Investment Survey; 5) which have not cut or omitted their common dividends during the five years ending 2009 or through the time of the preparation of this testimony; 6) which have 60% or greater of 2009 total operating income derived from and 60% or greater of 2009 total assets devoted to regulated water operations; and 7) which at the time of the preparation of Ms. Ahern's accompanying direct testimony, had not publicly announced that they were involved in any major merger or acquisition activity.

The following six water companies met the above criteria:

American States Water Co.
Aqua America, Inc.
California Water Service Group
Connecticut Water Service, Inc.
Middlesex Water Company
York Water Co.

Source of Information:

Standard & Poor's Compustat Services, Inc., PC Plus / Research
Insight Database
EDGAR Online's I-Metrix Database
Company Annual Forms 10K
AUS Merger and Acquisition Quarterly Report, March 31, 2010

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Six AUS Utility Reports Water Companies
2005 - 2009, Inclusive

	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>5 YEAR</u> <u>AVERAGE</u>
<u>American States Water Co.</u>						
Long-Term Debt	46.95 %	46.25 %	46.99 %	48.61 %	50.46 %	47.85 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	53.05	53.75	53.01	51.39	49.54	52.15
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Aqua America, Inc.</u>						
Long-Term Debt	56.59 %	54.21 %	55.88 %	51.55 %	52.61 %	54.17 %
Preferred Stock	0.02	0.09	0.09	0.10	0.09	0.08
Common Equity	43.39	45.70	44.03	48.35	47.30	45.75
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>California Water Service Group</u>						
Long-Term Debt	47.93 %	41.88 %	42.86 %	43.47 %	48.07 %	44.84 %
Preferred Stock	0.00	0.00	0.51	0.51	0.61	0.33
Common Equity	52.07	58.12	56.63	56.01	51.33	54.83
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>99.99 %</u>	<u>100.01 %</u>	<u>100.00 %</u>
<u>Connecticut Water Service, Inc.</u>						
Long-Term Debt	50.59 %	46.94 %	47.78 %	44.44 %	45.65 %	47.08 %
Preferred Stock	0.35	0.39	0.40	0.44	0.48	0.41
Common Equity	49.06	52.67	51.82	55.13	53.86	52.51
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.01 %</u>	<u>99.99 %</u>	<u>100.00 %</u>
<u>Middlesex Water Company</u>						
Long-Term Debt	47.35 %	49.10 %	49.48 %	49.98 %	55.68 %	50.33 %
Preferred Stock	1.24	1.22	1.46	1.49	1.69	1.42
Common Equity	51.41	49.68	49.06	48.53	42.62	48.26
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>99.99 %</u>	<u>100.01 %</u>
<u>York Water Company</u>						
Long-Term Debt	47.16 %	55.31 %	51.17 %	48.82 %	50.71 %	50.63 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	52.84	44.69	48.83	51.18	49.29	49.37
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Proxy Group of Six AUS Utility Reports Water Companies</u>						
Long-Term Debt	49.43 %	48.95 %	49.03 %	47.81 %	50.53 %	49.15 %
Preferred Stock	0.27	0.28	0.41	0.42	0.48	0.37
Common Equity	50.30	50.77	50.55	51.77	48.99	50.48
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>99.99 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>

Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2005 - 2009, INCLUSIVE

	2009	2008	2007		2006	2005
(MILLIONS OF DOLLARS)						
<u>CAPITALIZATION STATISTICS</u>						
AMOUNT OF CAPITAL EMPLOYED						
TOTAL PERMANENT CAPITAL	\$1,885.383	\$1,758.066	\$1,713.807	\$1,653.446	\$1,564.180	
SHORT-TERM DEBT	\$163.785	\$281.048	\$185.280	\$205.854	\$141.485	
TOTAL CAPITAL EMPLOYED	\$2,049.168	\$2,039.114	\$1,899.087	\$1,859.300	\$1,705.665	
<u>INDICATED AVERAGE CAPITAL COST RATES (2)</u>						
TOTAL DEBT	4.90 %	4.96 %	5.97 %	6.25 %	6.08 %	
PREFERRED STOCK	4.25	4.82	4.83	4.80	4.78	5 YEAR AVERAGE
<u>CAPITAL STRUCTURE RATIOS</u>						
BASED ON TOTAL PERMANENT CAPITAL:						
LONG-TERM DEBT	47.96 %	46.56 %	47.45 %	48.65 %	49.50 %	48.02 %
PREFERRED STOCK	0.26	0.28	0.33	0.32	0.30	0.30
COMMON EQUITY	51.78	53.16	52.22	51.03	50.18	51.68
TOTAL	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
<u>BASED ON TOTAL CAPITAL:</u>						
TOTAL DEBT, INCLUDING SHORT-TERM	52.39 %	54.13 %	53.31 %	55.10 %	54.31 %	53.84 %
PREFERRED STOCK	0.23	0.23	0.29	0.28	0.30	0.27
COMMON EQUITY	47.38	45.64	46.40	44.62	45.40	45.89
TOTAL	100.00 %	100.00 %	100.00 %	100.00 %	100.01 %	100.00 %
<u>FINANCIAL STATISTICS</u>						
<u>FINANCIAL RATIOS - MARKET BASED</u>						
EARNINGS / PRICE RATIO	7.07 %	7.69 %	7.17 %	7.90 %	7.68 %	7.50 %
MARKET / AVERAGE BOOK RATIO	155.24	163.48	160.25	149.68	148.87	155.50
DIVIDEND YIELD	4.61	4.30	4.26	4.54	4.78	4.50
DIVIDEND PAYOUT RATIO	73.28	55.52	60.43	59.50	63.81	62.51
<u>RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY</u>						
	10.34 %	12.47 %	11.25 %	11.96 %	11.65 %	11.53 %
<u>TOTAL DEBT / EBITDA (3)</u>						
	4.10 X	3.59 X	3.58 X	3.52 X	4.04 X	3.77 X
<u>FUNDS FROM OPERATIONS / TOTAL DEBT (4)</u>						
	24.90 %	18.90 %	20.21 %	18.86 %	19.49 %	20.47 %
<u>TOTAL DEBT / TOTAL CAPITAL</u>						
	52.39 %	54.13 %	53.31 %	55.10 %	54.31 %	53.85 %

See Page 2 for notes.

Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies
Capitalization and Financial Statistics
2005-2009, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
- (2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
- (3) Total debt as a percentage of EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
- (4) Funds from operations (as defined in Note 3) as a percentage of total debt.

Selection Criteria:

The basis of selection was to include those gas distribution companies: 1) which are included in the Natural Gas Distribution & Integrated Natural Gas Company Group of AUS Utility Reports (April 2010); 2) which have Value Line five-year EPS growth rate projections or Reuters consensus five-year EPS growth rate projections; 3) which have positive Value Line five-year DPS growth rate projections, 4) which have a Value Line adjusted beta as published in Value Line Investment Survey; 5) which have not cut or omitted their common dividends during the five years ending 2009 or through the time of the preparation of this testimony; 6) which have 60% or greater of 2009 total operating income derived from and 60% or greater of 2009 total assets devoted to regulated gas distribution operations; and 7) which at the time of the preparation of Ms. Ahern's accompanying direct testimony, had not publicly announced that they were involved in any major merger or acquisition activity.

The following eight gas distribution companies met the above criteria:

AGL Resources, Inc.	Northwest Natural Gas Company
Atmos Energy Corp.	Piedmont Natural Gas Co., Inc.
Delta Natural Gas Company	South Jersey Industries, Inc.
Laclede Group, Inc'	Southwest Gas Corporation
New Jersey Resources Corp.	WGL Holdings, Inc.

Source of Information: Standard & Poor's Compustat Services, Inc., PC Plus / Research
Insight Database
EDGAR Online's I-Metrix Database
Company Annual Forms 10K
AUS Merger and Acquisition Quarterly Report, March 31, 2010

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies
2005 - 2009, Inclusive

	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>5 YEAR AVERAGE</u>
<u>AGL Resources Inc.</u>						
Long-Term Debt	52.04 %	49.87 %	49.50 %	49.56 %	51.23 %	50.44 %
Preferred Stock	1.03	0.95	1.39	1.28	1.21	1.17
Common Equity	46.93	49.18	49.11	49.16	47.56	48.39
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Atmos Energy Corporation</u>						
Long-Term Debt	49.92 %	50.82 %	52.01 %	56.99 %	57.71 %	53.49 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	50.08	49.18	47.99	43.01	42.29	46.51
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Delta Natural Gas Company</u>						
Long-Term Debt	51.45 %	50.82 %	52.36 %	53.28 %	51.69 %	51.92 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	48.55	49.18	47.64	46.72	48.31	48.08
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Laclede Group, Inc.</u>						
Long-Term Debt	60.09 %	44.42 %	47.97 %	49.50 %	50.87 %	50.57 %
Preferred Stock	0.01	0.07	0.10	0.12	0.13	0.09
Common Equity	39.90	55.51	51.93	50.38	49.00	49.34
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>New Jersey Resources Corp.</u>						
Long-Term Debt	40.11 %	41.48 %	37.54 %	35.09 %	42.25 %	39.29 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	59.89	58.52	62.46	64.91	57.75	60.71
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Northwest Natural Gas Co.</u>						
Long-Term Debt	49.10 %	44.90 %	46.50 %	47.69 %	47.43 %	47.12 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	50.90	55.10	53.50	52.31	52.57	52.88
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Piedmont Natural Gas Co., Inc.</u>						
Long-Term Debt	46.06 %	48.16 %	48.43 %	48.30 %	42.74 %	46.74 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	53.94	51.84	51.57	51.70	57.26	53.26
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>South Jersey Industries, Inc.</u>						
Long-Term Debt	38.98 %	40.93 %	42.64 %	44.83 %	45.08 %	42.49 %
Preferred Stock	0.00	0.14	0.05	0.06	0.06	0.06
Common Equity	61.02	58.93	57.31	55.11	54.86	57.45
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Southwest Gas Corporation</u>						
Long-Term Debt	55.43 %	55.48 %	58.80 %	61.07 %	65.21 %	59.20 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	44.57	44.52	41.20	38.93	34.79	40.80
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>WGL Holdings, Inc.</u>						
Long-Term Debt	36.40 %	38.72 %	38.72 %	40.14 %	40.75 %	38.95 %
Preferred Stock	1.59	1.60	1.71	1.78	1.81	1.70
Common Equity	62.01	59.68	59.57	58.08	57.44	59.35
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>						
Long-Term Debt	47.96 %	46.56 %	47.45 %	48.65 %	49.50 %	48.02 %
Preferred Stock	0.26	0.28	0.33	0.32	0.32	0.30
Common Equity	51.78	53.15	52.23	51.03	50.18	51.67
Total Capital	<u>100.00 %</u>	<u>99.99 %</u>	<u>100.01 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>99.99 %</u>

Tega Cay Water Service, Inc.
Hypothetical Example of the Inadequacy of
A DCF Return Rate Related to Book Value
When Market Value is Greater / Less than Book Value

<u>Line No.</u>		<u>1</u>	<u>2</u>	<u>3</u>
		<u>Market Value</u>	<u>Book Value with Market to Book Ratio of 180%</u>	<u>Book Value with Market to Book Ratio of</u>
1.	Per Share	\$ 24.00	\$ 13.33	\$ 30.00
2.	DCF Cost Rate (1)	10.00%	10.00%	10.00%
3.	Return in Dollars	\$ 2.400	\$ 1.333	\$ 3.000
4.	Dividends (2)	\$ 0.840	\$ 0.840	\$ 0.840
5.	Growth in Dollars	\$ 1.560	\$ 0.493	\$ 2.160
6.	Return on Market Value	10.00%	5.55% (3)	12.50% (4)
7.	Rate of Growth on Market Val	6.50% (5)	2.05% (6)	9.00% (7)

Notes: (1) Comprised of 3.5% dividend yield and 6.5% growth.

(2) $\$24.00 \times 3.5\% \text{ yield} = \0.840 .

(3) $\$1.333 / \$24.00 \text{ market value} = 5.55\%$.

(4) $\$3.000 / \$24.00 \text{ market value} = 12.50\%$.

(5) Expected rate of growth per market based DCF model.

(6) Actual rate of growth when DCF cost rate is applied to book value ($\$1.333$ possible earnings - $\$0.840$ dividends = $\$0.493$ for growth / $\$24.00$ market value = 2.05%).

(7) Actual rate of growth when DCF cost rate is applied to book value ($\$3.000$ possible earnings - $\$0.840$ dividends = $\$2.160$ for growth / $\$24.00$ market value = 9.00%).

Tega Cay Water Service, Inc.
Indicated Common Equity Cost Rate Through Use of the
Single Stage Discounted Cash Flow Model for
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

Based upon Projected Growth in EPS

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
	Average Dividend Yield (1)	Dividend Growth Component (2)	Adjusted Dividend Yield (3)	Growth Rate (4)	Indicated Common Equity Cost Rate (5)
<u>Proxy Group of Six AUS Utility Reports Water Companies</u>					
American States Water Co.	2.94 %	0.10 %	3.04 %	6.75 %	9.79 %
Aqua America, Inc.	3.32	0.15	3.47	9.30	12.77
California Water Service Group	3.18	0.12	3.30	7.25	10.55
Connecticut Water Service, Inc.	3.98	0.18	4.16	9.00	13.16
Middlesex Water Company	4.18	0.19	4.37	9.00	13.37
York Water Company	<u>3.75</u>	<u>0.13</u>	<u>3.88</u>	<u>6.75</u>	<u>10.63</u>
Average	<u>3.56 %</u>	<u>0.15 %</u>	<u>3.70 %</u>	<u>8.01 %</u>	<u>11.71 %</u>
Median	<u>3.54 %</u>	<u>0.14 %</u>	<u>3.68 %</u>	<u>8.13 %</u>	<u>11.70 %</u>
<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>					
AGL Resources Inc.	4.66 %	0.11 %	4.77 %	4.55 %	9.32 %
Atmos Energy Corporation	4.69	0.12	4.81	5.00	9.81
Delta Natural Gas Company	4.42	0.07	4.49	3.00	7.49
Laclede Group, Inc.	4.69	0.06	4.75	2.50	7.25
New Jersey Resources Corp.	3.61	0.10	3.71	5.80	9.51
Northwest Natural Gas Co.	3.63	0.10	3.73	5.25	8.98
Piedmont Natural Gas Co., Inc.	4.08	0.11	4.19	5.50	9.69
South Jersey Industries, Inc.	3.19	0.15	3.34	9.50	12.84
Southwest Gas Corporation	3.20	0.11	3.31	6.75	10.06
WGL Holdings, Inc.	<u>4.38</u>	<u>0.03</u>	<u>4.41</u>	<u>1.55</u>	<u>5.96</u>
Average	<u>4.06 %</u>	<u>0.10 %</u>	<u>4.15 %</u>	<u>4.94 %</u>	<u>9.09 %</u>
Median	<u>4.23 %</u>	<u>0.11 %</u>	<u>4.30 %</u>	<u>5.13 %</u>	<u>9.42 %</u>

Notes: (1) From Schedule 7.

(2) This reflects a growth rate component equal to one-half the conclusion of growth rate (from Schedule 9) x Column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Co. , $2.94\% \times (1/2 \times 6.75\%) = 0.1\%$.

(3) Column 1 + Column 2.

(4) From page 1, Schedule 9.

(5) Column 3 + Column 4.

Tega Cay Water Service, Inc.
Derivation of Dividend Yield for Use in the
Discounted Cash Flow Model

	Dividend Yield		
	Spot	Average of Last 3 Months (2)	Average Dividend Yield (3)
	(04/09/2010) (1)		
<u>Proxy Group of Six AUS Utility Reports Water Companies</u>			
American States Water Co.	2.75 %	3.12 %	2.94 %
Aqua America, Inc.	3.24	3.40	3.32
California Water Service Group	3.13	3.24	3.18
Connecticut Water Service, Inc.	3.93	4.02	3.98
Middlesex Water Company	4.12	4.25	4.18
York Water Company	<u>3.70</u>	<u>3.79</u>	<u>3.75</u>
Average	<u>3.48 %</u>	<u>3.64 %</u>	<u>3.56 %</u>
Median	<u>3.47 %</u>	<u>3.59 %</u>	<u>3.54 %</u>
<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>			
AGL Resources Inc.	4.60 %	4.72 %	4.66 %
Atmos Energy Corporation	4.57	4.81	4.69
Delta Natural Gas Company	4.42	4.42	4.42
Laclede Group, Inc.	4.58	4.80	4.69
New Jersey Resources Corp.	3.53	3.69	3.61
Northwest Natural Gas Co.	3.54	3.72	3.63
Piedmont Natural Gas Co., Inc.	4.06	4.10	4.08
South Jersey Industries, Inc.	3.08	3.30	3.19
Southwest Gas Corporation	3.07	3.32	3.20
WGL Holdings, Inc.	<u>4.30</u>	<u>4.46</u>	<u>4.38</u>
Average	<u>3.97 %</u>	<u>4.13 %</u>	<u>4.06 %</u>
Median	<u>4.18 %</u>	<u>4.26 %</u>	<u>4.23 %</u>

- Notes: (1) The spot dividend yield is the current annualized dividend per share divided by the spot market price on 04/09/2010.
- (2) The average 3-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the three months ended 03/31/2010.
- (3) Equal weight has been given to the 3-month average and spot dividend yield. This provides recognition of current conditions, but does not place undue emphasis thereon.

Source of Information: yahoo.finance.com

Tega Cay Water Service, Inc.
Current Institutional Holdings and Individual Holdings
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

	<u>1</u>	<u>2</u>
	9-Apr-10 Percentage of Institutional Holdings	9-Apr-10 Percentage of Individual Holdings (1)
<u>Proxy Group of Six AUS Utility Reports Water Companies</u>		
American States Water Co.	59.15 %	40.85 %
Aqua America, Inc.	44.06	55.94
California Water Service Group	49.60	50.40
Connecticut Water Service, Inc.	35.24	64.76
Middlesex Water Company	37.82	62.18
York Water Company	<u>23.55</u>	<u>76.45</u>
Average	<u>41.57 %</u>	<u>58.43 %</u>
 <u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>		
AGL Resources Inc.	59.68 %	40.32 %
Atmos Energy Corporation	59.56	40.44
Delta Natural Gas Company	18.69	81.31
Laclede Group, Inc.	47.70	52.30
New Jersey Resources Corp.	58.98	41.02
Northwest Natural Gas Co.	57.08	42.92
Piedmont Natural Gas Co., Inc.	46.94	53.06
South Jersey Industries, Inc.	53.41	46.59
Southwest Gas Corporation	73.28	26.72
WGL Holdings, Inc.	<u>63.28</u>	<u>36.72</u>
Average	<u>53.86 %</u>	<u>46.14 %</u>

(1) (1 - column 1).

Source of Information: pro.edgar-online.com, April 9, 2010

Tega Cay Water Service, Inc.
Projected Growth

	<u>1</u>	<u>2</u>	<u>3</u>
	<u>Value Line Projected</u>	<u>Reuters Mean Consensus Projected Five Year Growth Rate</u>	<u>Average Projected Five Year Growth Rate in EPS (2)</u>
	<u>EPS</u>	<u>EPS</u>	<u>No. of Est.</u>
<u>Proxy Group of Six AUS Utility Reports Water Companies</u>			
American States Water Co.	9.50 %	4.00 %	[1]
Aqua America, Inc.	10.00	8.60	[5]
California Water Service Group	8.50	6.00	[2]
Connecticut Water Service, Inc.	9.00	NA	
Middlesex Water Company	9.00	NA	
York Water Company	<u>7.50</u>	<u>6.00</u>	[1]
Average	<u>8.92 %</u>	<u>6.15 %</u>	<u>8.01 %</u>
Median	<u>9.00 %</u>	<u>6.00 %</u>	<u>8.13 %</u>
<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>			
AGL Resources Inc.	3.50 %	5.60 %	[4]
Atmos Energy Corporation	5.50	4.50	[5]
Delta Natural Gas Company	3.00	3.00	[1]
Laclede Group, Inc.	2.50	NA	
New Jersey Resources Corp.	6.50	5.10	[2]
Northwest Natural Gas Co.	5.00	5.50	[2]
Piedmont Natural Gas Co., Inc.	4.00	7.00	[2]
South Jersey Industries, Inc.	5.50	13.50	[2]
Southwest Gas Corporation	8.00	5.50	[2]
WGL Holdings, Inc.	<u>2.50</u>	<u>0.60</u>	[1]
Average	<u>4.60 %</u>	<u>5.59 %</u>	<u>4.94 %</u>
Median	<u>4.50 %</u>	<u>5.50 %</u>	<u>5.13 %</u>

NA= Not Available

Notes: (1) As shown on pages 2 through 17 of this Schedule.
(2) Average of Columns 1 and 2.

Source of Information: Value Line Investment Survey, January 22, 2010 and March 12, 2010,
Standard Edition and Small and Mid-Cap Edition
Reuters Company Research, April 8, 2010

AMER. STATES WATER NYSE:AWR										RECENT PRICE		34.75		P/E RATIO		18.5 (Trailing: 18.6 Median: 22.0)		RELATIVE P/E RATIO		1.07		DIV'D YLD		3.0%		VALUE LINE																					
TIMELINESS 3 Lowered 6/5/09										High: 19.5		26.5		25.3		28.4		29.0		29.0		26.8		34.6		43.8		46.1		42.0		38.8		29.8		Target Price Range		2012		2013		2014					
SAFETY 3 New 2/4/00										Low: 14.1		14.8		16.7		19.0		20.3		21.6		20.8		24.3		30.3		33.6		27.0																	
TECHNICAL 3 Raised 12/4/09										LEADS		1.25 x Dividends p.sh.		divided by Interest Rate	 Relative Price Strength		3-for-2 split 6/02		Options: No		Shaded area: prior recession		Latest recession began 12/07																							
BETA .80 (1.00 = Market)																																															
2012-14 PROJECTIONS										Price		Gain		Ann'l Total		Return																															
High 60										40		(+75%)		17%																																	
Low 40										0		(+15%)		6%																																	
Insider Decisions										F M A M J J A S O																																					
to Buy 0 0 0 0 0 0 0 0 0 0										0		0		0		0		0		0		0		0		0		0		0		0		0		0		0									
Options to Sell 0 0 0 0 0 0 0 0 0 0										0		0		0		0		0		0		0		0		0		0		0		0		0		0											
Institutional Decisions										1Q2009		2Q2009		3Q2009																																	
to Buy 55										66		54		53																																	
to Sell 66										53		54																																			
Hld's(000) 9283										10578		10847																																			
Percent shares traded										12		8		4																																	
1993										1994		1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		© VALUE LINE PUB., INC.		12-14	
9.27										10.43		11.03		11.37		11.44		11.02		12.91		12.17		13.06		13.78		13.98		13.61		14.06		15.76		17.49		18.42		19.60		20.55		Revenues per sh		21.75	
1.67										1.68		1.75		1.75		1.85		2.04		2.26		2.20		2.53		2.54		2.08		2.64		2.69		3.31		3.37		3.65		3.90		"Cash Flow" per sh		2.60			
1.11										.95		1.03		1.13		1.04		1.08		1.19		1.28		1.35		1.34		.78		1.05		1.32		1.33		1.62		1.55		1.85		2.00		Earnings per sh A		4.60	
.79										.80		.81		.82		.83		.84		.85		.86		.87		.88		.89		.90		.91		.96		1.00		1.01		1.05		Div'd Decl'd per sh B		1.22			
1.90																																															

To subscribe call 1-800-833-0046.

© 2010, Value Line Publishing, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

AQUA AMERICA					NYSE-WTR		RECENT PRICE	17.57	P/E RATIO	20.9	(Trailing: 23.7 Median: 25.0)	RELATIVE P/E RATIO	1.21	DIV'D YLD	3.4%	VALUE LINE	Target Price Range																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
					High: 11.5	11.5	12.0	14.8	15.0	16.8	18.5	29.2	29.8	26.6	22.0	21.5		2012	2013	2014																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Low: 7.2	7.6	6.3	9.4	9.6	11.8	14.2	17.5	20.1	18.9	12.2	15.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
TIMELINESS 3					Lowered 6/26/09																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
SAFETY 3					Lowered 8/1/03																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
TECHNICAL 3					Lowered 1/1/10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
BETA .65					(1.00 = Market)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
2012-14 PROJECTIONS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Price					Ann'l Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Gain					Return																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
High					30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Low					20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
					+15%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
					14%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
					3%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Insider Decisions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
F M A M J J A S O																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
to Buy					0 0 0 0 0 0 0 0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Options					1 30 117 88																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
to Sell					0 0 0 0 0 0 0 0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
to Still					0 0 0 0 0 0 0 0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Institutional Decisions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
102009					202009					302009																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
to Buy					130 117 88																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
to Sell					134 136 118																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Mtd (\$00)					63551 61341 60196																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1993					1994					1995					1996					1997					1998					1999					2000					2001					2002					2003					2004					2005					2006					2007					2008					2009					2010					© VALUE LINE PUB., INC.					12-14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1.70					1.82					1.84					1.86					2.02					2.09					2.41					2.46					2.70					2.85					2.97					3.48					3.85					4.03					4.52					4.63					4.95					5.35					Revenues per sh					6.45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
.42					.42					.47					.50					.56					.61					.72					.76					.86					.94					.96					1.09					1.21					1.26					1.37					1.42					1.70					1.85					"Cash Flow" per sh					2.40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
.24					.26					.29					.30					.34					.40					.42					.47					.51					.54					.57					.64					.71					.70					.71					.73					.80					.90					Earnings per sh A					1.25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
.21					.21					.22					.23					.24					.26					.27					.28					.30					.32					.35					.37					.40					.44					.48					.51					.55					.59					Div'd Decl'd per sh B					.70																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
.47					.46					.52					.48					.58					.82					.90					1.16					1.09					1.20					1.32					1.54					1.84					2.05					1.79					1.98					1.90					1.95					Cap'l Spending per sh					2.15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2.29					2.41					2.46					2.69					2.84					3.21					3.42					3.85					4.15					4.36					5.34					5.89					6.30					6.96					7.32					7.82					7.90					8.35					Book Value per sh					10.35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
59.40					59.77					63.74					65.75					67.47					72.20					106.80					111.82					113.97					113.19					123.45					127.18					128.97					132.33					133.40					135.37					136.30					137.00					Common Shs Outst'g C					139.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
14.4					13.5					12.0					15.6					17.8					22.5					21.2					18.2					23.6					23.6					24.5					25.1					31.8					34.7					32.0					24.9					22.2					Avg Ann'l P/E Ratio					21.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
.85					.89					.80					.98					1.03					1.17					1.21					1.18					1.21					1.29					1.40					1.33					1.69					1.87					1.70					1.50					1.48					Relative P/E Ratio					1.40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
5.9%					6.0%					6.2%					4.9%					3.9%					2.9%					3.0%					3.3%					2.5%					2.5%					2.5%					2.3%					1.8%					1.8%					2.1%					2.8%					3.0%					Avg Ann'l Div'd Yield					2.0%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
CAPITAL STRUCTURE as of 9/30/09																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

CALIFORNIA WATER NYSE:CWT										RECENT PRICE 36.83		P/E RATIO 18.4 (Trailing: 18.5; Median: 22.0)		RELATIVE P/E RATIO 1.06		DIV'D YLD 3.2%		VALUE LINE	
TIMELINESS 4 Lowered 11/6/09 SAFETY 3 Lowered 7/27/07 TECHNICAL 3 Lowered 12/25/09 BETA .75 (1.00 = Market)										LEGENDS High: 33.8 32.0 31.4 28.6 26.9 31.4 37.9 42.1 45.8 45.4 46.6 48.3 Low: 20.8 22.6 21.5 22.9 20.5 23.7 26.1 31.2 32.8 34.2 27.7 33.5 1.3 x Dividends p sh divided by Interest Rate Relative Price Strength 2-for-1 split 1/98 Options: Yes Shaded area: prior recession Latest recession began 12/07									
2012-14 PROJECTIONS Price Gain Ann'l Total High 60 (+65%) 15% Low 40 (+10%) 5%																			
Insider Decisions F M A M J J A S O to Buy 0 0 0 0 0 0 0 0 0 0 to Sell 0 0 0 0 0 0 0 0 0 0 Options 0 0 0 0 0 0 0 0 0 0										Institutional Decisions 1Q2009 2Q2009 3Q2009 to Buy 83 76 56 to Sell 81 85 75 Hld's(%) 10000 10018 9635									
Percent shares traded 9 6 3										% TOT. RETURN 12/09 THIS STOCK VL ARITH. INDEX 1 yr. -18.2 60.8 3 yr. -0.7 1.9 5 yr. 13.2 25.9									
Historical Data (1993-2010) 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010										© VALUE LINE PUB., INC. 12-14									
13.34 12.59 13.17 14.48 15.48 14.76 15.96 16.16 16.26 17.33 16.37 17.18 17.44 16.20 17.76 19.80 21.35 22.10 2.25 2.02 2.07 2.50 2.92 2.60 2.75 2.52 2.20 2.65 2.51 2.83 3.03 2.71 3.12 3.72 4.05 4.25 1.35 1.22 1.17 1.51 1.83 1.45 1.53 1.31 .94 1.25 1.21 1.46 1.47 1.34 1.50 1.90 1.99 2.10 .96 .99 1.02 1.04 1.06 1.07 1.09 1.10 1.12 1.12 1.12 1.13 1.14 1.15 1.16 1.17 1.18 1.19 2.53 2.26 2.17 2.83 2.61 2.74 3.44 2.45 4.09 5.82 4.39 3.73 4.01 4.28 3.68 4.82 5.20 5.25 10.90 11.56 11.72 12.22 13.00 13.38 13.43 12.90 12.95 13.12 14.44 15.66 15.79 18.15 18.50 19.44 20.00 19.75 11.38 12.49 12.54 12.62 12.62 12.62 12.94 15.15 15.18 15.18 16.93 18.37 18.39 20.66 20.67 20.72 21.00 21.25 13.6 14.1 13.7 11.9 12.6 17.8 17.8 19.6 27.1 19.8 22.1 20.1 24.9 29.2 26.1 19.8 19.3 .80 .92 .92 .75 .73 .93 1.01 1.27 1.39 1.08 1.26 1.06 1.33 1.58 1.39 1.20 1.26 5.2% 5.8% 6.4% 5.8% 4.6% 4.2% 4.0% 4.3% 4.4% 4.5% 4.2% 3.9% 3.1% 2.9% 3.0% 3.1% 3.1%										Revenues per sh 23.90 "Cash Flow" per sh 4.80 Earnings per sh A 2.60 Div'd Decl'd per sh B 1.25 Cap'l Spending per sh 5.25 Book Value per sh C 21.30 Common Shs Outst'g D 23.00 Avg Ann'l P/E Ratio 19.0 Relative P/E Ratio 1.25 Avg Ann'l Div'd Yield 2.5%									
CAPITAL STRUCTURE as of 9/30/09 Total Debt \$397.9 mill. Due in 5 Yrs \$40.0 mill. LT Debt \$373.5 mill. LT Interest \$25.0 mill.										206.4 244.8 246.8 263.2 277.1 315.6 320.7 334.7 367.1 410.3 448 470 Revenues (\$mill) E 550 19.9 20.0 14.4 19.1 19.4 26.0 27.2 25.6 31.2 39.8 42.0 45.0 Net Profit (\$mill) 60.0 37.9% 42.3% 39.4% 39.7% 39.9% 39.6% 42.4% 37.4% 39.9% 37.7% 40.0% 39.0% Income Tax Rate 39.0% -- -- -- -- 10.3% 3.2% 3.3% 10.6% 8.3% 8.6% 8.5% 10.0% AFUDC % to Net Profit 10.0% 46.9% 48.9% 50.3% 55.3% 50.2% 48.6% 48.3% 43.5% 42.9% 41.6% 47.0% 46.5% Long-Term Debt Ratio 48.5% 52.0% 50.2% 48.8% 44.0% 49.1% 50.8% 51.1% 55.9% 56.6% 58.4% 53.0% 53.5% Common Equity Ratio 51.5% 333.8 388.8 402.7 453.1 498.4 565.9 568.1 670.1 674.9 690.4 795 805 Total Capital (\$mill) 950 515.4 582.0 624.3 697.0 759.5 800.3 862.7 941.5 1010.2 1112.4 1175 1240 Net Plant (\$mill) 1425 7.8% 6.8% 5.3% 5.9% 5.6% 6.1% 6.3% 5.2% 5.9% 7.1% 7.0% 7.0% Return on Total Cap'l 8.0% 11.2% 10.0% 7.2% 9.4% 7.8% 8.9% 9.3% 6.8% 8.1% 9.9% 10.0% 10.5% Return on Shr. Equity 12.0% 10.4% 10.1% 7.2% 9.5% 7.9% 9.0% 9.3% 6.8% 8.1% 9.9% 10.0% 10.5% Return on Com Equity 12.0% 3.5% 1.8% NMF 1.0% .7% 2.1% 2.1% 1.0% 1.8% 3.8% 4.0% 5.0% Retained to Com Eq 6.5% 70% 82% 119% 90% 91% 77% 78% 86% 77% 61% 59% 56% All Div'ds to Net Prof 48%									
Pension Assets-12/08 \$66.9 mill. Oblig. \$192.9 mill.										Business Description: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue									
Pfd Stock None										Improvements on the regulatory front augur well for California Water Service Group's top line. Indeed, earlier rate increases handed down by the California Public Utilities Commission (CPUC) enabled the water utility to post record-high revenues of \$139.2 million in the third quarter, a 6% improvement from the year before. We look for similar growth in the fourth quarter and for full-year 2010. Meanwhile, the company filed its 2009 general rate case during the period, seeking \$71 million in 2011 with increases of nearly \$25 million in 2012 and 2013. It was CWT's first consolidated request, covering all 24 districts, and a ruling may well take 18 months to be made. We expect a relatively favorable outcome given the CPUC's more recent disposition. However, operating costs appear to be on the rise, too. Despite the top-line benefits mentioned above, share earnings fell 11% in the September period and came in a dime below our estimate. Operating expenses swelled 10%, as aging infrastructures required greater maintenance, and the increased demand drove up distribution costs. We suspect that these trends									
Common Stock 20,744,952 shs. as of 11/2/09										peristed in the fourth quarter and will only intensify going forward. As a result, we've tempered our expectations, estimating that CWT barely broke even in the final quarter of 2009 and that earnings growth will not be anything to write home about for full-year 2010. The stock has fallen a notch for Timeliness and is now ranked 4 (Below Average). Recent share-price declines, coupled with the tough outlook, make this an unattractive selection for the coming six to 12 months. Its 3- to 5-year appeal is better, but still lacking in our opinion. CWT does not have the finances on hand to meet the rising infrastructure costs that are likely to amount over the next couple of years. The share and/or debt offerings that will be required to help improve the									

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, 7¢; '01, 4¢; '02, 8¢. Next earnings report due early February.	(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.	(C) Incl. deferred charges. In '08: \$3.9 mill., \$.19/sh. (D) In millions, adjusted for split.
--	---	--

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	80

© 2010, Value Line Publishing, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

To subscribe call 1-800-833-0046.

CONN. WATER SERVICES

NDQ-CTWS

RECENT PRICE

23.77

TRAILING P/E RATIO

20.0

RELATIVE P/E RATIO

1.11

DIV'D YLD

3.8%

VALUE LINE

RANKS

32.21
19.50

31.09
20.35

30.41
24.00

29.76
23.83

28.17
21.91

27.71
20.29

25.61
22.40

28.95
19.26

26.44
17.31

High
Low

PERFORMANCE 3

Average

Technical 3

Average

SAFETY 2

Above Average

BETA .80

(1.00 = Market)

LEGENDS

12 Mos Mov Avg

Rel Price Strength

3-for-2 split 9/01

Shaded area indicates recession

45

30

22.5

13

9

6

4

3

450

VOL.

(thous.)

Financial Strength

B+

Price Stability

90

Price Growth Persistence

35

Earnings Predictability

80

© VALUE LINE PUBLISHING, INC.

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010/2011

SALES PER SH

5.93

5.77

5.91

6.04

5.81

5.68

7.05

7.24

--

"CASH FLOW" PER SH

1.78

1.78

1.89

1.91

1.62

1.52

1.90

1.95

--

EARNINGS PER SH

1.13

1.12

1.15

1.16

.88

.81

1.05

1.11

1.19^{A,B}

1.08^C/NA

DIV'DS DECL'D PER SH

.80

.81

.83

.84

.85

.86

.87

.88

--

CAP'L SPENDING PER SH

1.86

1.98

1.49

1.58

1.96

1.96

2.24

2.44

--

BOOK VALUE PER SH

9.25

10.06

10.46

10.94

11.52

11.60

11.95

12.23

--

COMMON SHS OUTST'G (MILL)

7.65

7.94

7.97

8.04

8.17

8.27

8.38

8.46

--

AVG ANN'L P/E RATIO

21.5

24.3

23.5

22.9

28.6

29.0

23.0

22.2

20.0

22.0/NA

RELATIVE P/E RATIO

1.10

1.33

1.34

1.21

1.51

1.57

1.22

1.34

--

AVG ANN'L DIV'D YIELD

3.3%

3.0%

3.0%

3.1%

3.4%

3.6%

3.6%

3.6%

--

SALES (\$MILL)

45.4

45.8

47.1

48.5

47.5

46.9

59.0

61.3

--

Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.

OPERATING MARGIN

56.1%

57.7%

52.1%

51.0%

48.3%

43.7%

40.8%

49.0%

--

DEPRECIATION (\$MILL)

5.0

5.4

5.9

6.0

6.1

5.9

7.2

7.1

--

NET PROFIT (\$MILL)

8.7

8.8

9.2

9.4

7.2

6.7

8.8

9.4

--

INCOME TAX RATE

36.1%

33.8%

17.9%

22.9%

--

23.5%

32.4%

27.2%

--

NET PROFIT MARGIN

19.1%

19.2%

19.5%

19.4%

15.1%

14.3%

14.9%

15.4%

--

WORKING CAP'L (\$MILL)

d33

d51

d39

d7

13.0

1.2

8.1

d33

--

LONG-TERM DEBT (\$MILL)

64.0

64.8

64.8

66.4

77.4

77.3

92.3

92.2

--

SHR. EQUITY (\$MILL)

71.6

80.7

84.2

88.7

94.9

96.7

100.9

104.2

--

RETURN ON TOTAL CAP'L

7.9%

7.4%

7.5%

7.0%

5.0%

4.9%

5.5%

5.9%

--

RETURN ON SHR. EQUITY

12.1%

10.9%

10.9%

10.6%

7.5%

6.9%

8.7%

9.0%

--

RETAINED TO COM EQ

3.6%

3.1%

3.2%

3.1%

.3%

NMF

1.6%

1.9%

--

ALL DIV'DS TO NET PROF

71%

72%

71%

71%

95%

105%

82%

79%

--

No. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 9.0% per year.

Based upon 2 analysts' estimates.

Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)

5 Yrs.

1 Yr.

Sales

2.5%

2.5%

"Cash Flow"

-0.5%

2.5%

Earnings

-2.5%

5.5%

Dividends

1.5%

1.0%

Book Value

3.5%

2.5%

ASSETS (\$mill.)

2007

2008

9/30/09

Cash Assets

8.6

.7

8.1

Receivables

11.1

12.0

13.6

Inventory (Avg cost)

1.0

1.1

1.2

Other

2.3

2.0

3.0

Current Assets

23.0

15.8

25.9

LIABILITIES (\$mill.)

2007

2008

9/30/09

Accts Payable

6.0

5.7

6.8

Debt Due

6.5

12.1

31.6

Other

2.4

1.3

2.8

Current Liab

14.9

19.1

41.2

LONG-TERM DEBT AND EQUITY

as of 9/30/09

Total Debt \$123.6 mill.

Due in 5 Yrs. NA

LT Debt \$92.0 mill.

Including Cap. Leases NA

(46% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Property, Plant & Equip, at cost

392.5

418.1

--

Accum Depreciation

108.2

115.8

--

Net Property

284.3

302.3

323.6

Other

53.5

54.3

51.0

Total Assets

360.8

372.4

400.5

INDUSTRY: Water Utility

BUSINESS:

Connecticut Water Service, Inc. primarily operates as a water utility company in Connecticut. It operates through three segments: Water Activities, Real Estate Transactions, and Services and Rentals. The Water Activities segment supplies public drinking water to its customers. The Real Estate Transactions segment involves in the sale of its limited excess real estate holdings. The Services and Rentals segment provides contracted services to water and wastewater utilities and other clients, as well as leases certain of its properties to third parties. This segment's services include contract operations of water and wastewater facilities; Linebacker, its service line protection plan for public drinking water customers; and provision of bulk deliveries of emergency drinking water to businesses and residences via tanker truck. As of July 8, it provided water to more than 88,000 customers, or about 300,000 people, in 54 towns throughout Connecticut. Has 226 employees. Chairman, C.E.O. & President: Eric W. Thornburg, Inc.: CT. Address: 93 West Main Street, Clinton, CT 06413. Tel.: (860) 669-8636. Internet: http://www.ctwater.com. W.T.

January 22, 2010

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 12/31/2009

3 Mos.

6 Mos.

1 Yr.

3 Yrs.

5 Yrs.

11.75%

16.53%

9.40%

21.84%

12.17%

INSTITUTIONAL DECISIONS

1Q'09

2Q'09

3Q'09

to Buy

31

29

26

to Sell

24

23

19

Hld's(000)

2678

2776

2860

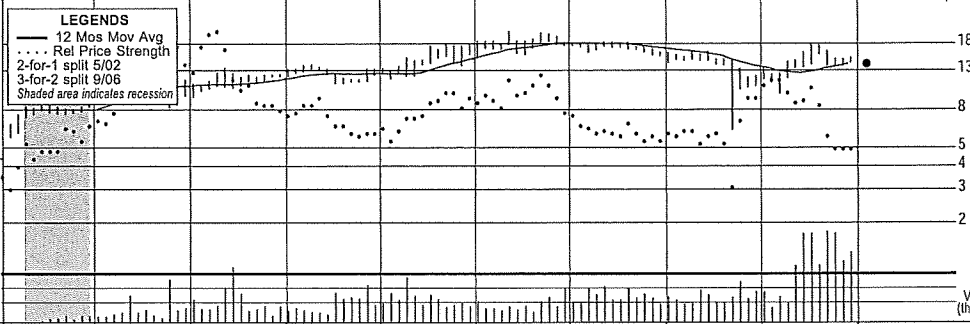
Pension Liability \$16.7 mill. in '08 vs. None in '07

Pfd Stock \$.8 mill.

Pfd Div'd Paid NMF

(54% of Cap'l)

MIDDLESEX WATER				NDQ-MSEX		RECENT PRICE 17.21		TRAILING P/E RATIO 23.6		RELATIVE P/E RATIO 1.31		DIV'D YLD 4.2%		VALUE LINE																			
RANKS				18.73	20.04	21.23	21.81	23.47	20.50	20.24	19.83	17.91	High Low																				
				14.69	13.73	15.77	16.65	17.07	16.50	16.93	12.05	11.64																					
PERFORMANCE 3 Average				<div>LEGENDS</div> <div>— 12 Mos Mov Avg</div> <div>... Rel Price Strength</div> <div>3-for-2 split 1/02</div> <div>4-for-3 split 11/03</div> <div>Shaded area indicates recession</div>										18																			
Technical 3 Average														13																			
SAFETY 2 Above Average														8																			
BETA .80 (1.00 = Market)														5																			
														4																			
Financial Strength B+														3																			
														2																			
Price Stability 95																																	
Price Growth Persistence 40																																	
Earnings Predictability 90														850 VOL. (thous.)																			
© VALUE LINE PUBLISHING, INC.														2001		2002		2003		2004		2005		2006		2007		2008		2009		2010/2011	
SALES PER SH				5.87		5.98		6.12		6.25		6.44		6.16		6.50		6.79		--													
"CASH FLOW" PER SH				1.18		1.20		1.15		1.28		1.33		1.33		1.49		1.53		--													
EARNINGS PER SH				.66		.73		.61		.73		.71		.82		.87		.89		.70 ^{A,B}						.80 ^C /NA							
DIV'DS DECL'D PER SH				.62		.63		.65		.66		.67		.68		.69		.70		--													
CAP'L SPENDING PER SH				1.25		1.59		1.87		2.54		2.18		2.31		1.66		2.12		--													
BOOK VALUE PER SH				7.11		7.39		7.60		8.38		8.60		9.82		10.05		10.28		--													
COMMON SHS OUTST'G (MILL)				10.17		10.36		10.48		11.36		11.58		13.17		13.25		13.40		--													
AVG ANN'L P/E RATIO				24.6		23.5		30.0		26.4		27.4		22.7		21.6		19.8		24.6						21.5/NA							
RELATIVE P/E RATIO				1.26		1.28		1.71		1.39		1.45		1.23		1.15		1.19		--													
AVG ANN'L DIV'D YIELD				3.8%		3.7%		3.5%		3.4%		3.5%		3.7%		3.7%		4.0%		--													
SALES (\$MILL)				59.6		61.9		64.1		71.0		74.6		81.1		86.1		91.0		--						Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.							
OPERATING MARGIN				47.2%		47.1%		44.0%		44.4%		44.4%		47.4%		47.0%		46.9%		--													
DEPRECIATION (\$MILL)				5.3		5.0		5.6		6.4		7.2		7.8		8.2		8.5		--													
NET PROFIT (\$MILL)				7.0		7.8		6.6		8.4		8.5		10.0		11.8		12.2		--													
INCOME TAX RATE				34.8%		33.3%		32.8%		31.1%		27.6%		33.4%		32.6%		33.2%		--													
NET PROFIT MARGIN				11.7%		12.5%		10.3%		11.9%		11.4%		12.4%		13.8%		13.4%		--													
WORKING CAP'L (\$MILL)				d.9		d9.3		d13.3		d11.8		d4.5		2.8		d9.6		d40.9		--													
LONG-TERM DEBT (\$MILL)				88.1		87.5		97.4		115.3		128.2		130.7		131.6		118.2		--													
SHR. EQUITY (\$MILL)				76.4		80.6		83.7		99.2		103.6		133.3		137.1		141.2		--													
RETURN ON TOTAL CAP'L				5.6%		6.0%		5.0%		5.1%		5.0%		5.1%		5.6%		5.8%		--													
RETURN ON SHR. EQUITY				9.1%		9.6%		7.9%		8.5%		8.2%		7.5%		8.6%		8.6%		--													
RETAINED TO COM EQ				.5%		1.3%		NMF		.9%		.5%		1.2%		1.8%		1.9%		--													
ALL DIV'DS TO NET PROF				94%		87%		106%		90%		94%		84%		79%		78%		--													
^A No. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 9.0% per year. ^B Based upon 3 analysts' estimates. ^C Based upon 3 analysts' estimates.																																	
ANNUAL RATES														INDUSTRY: Water Utility																			
of change (per share)														BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey (NJ) and Delaware, and a regulated wastewater utility in NJ. It offers contract operations services and a service line maintenance program through its nonregulated subsidiary, Utility Service Affiliates, Inc. Its water utility system treats, stores, and distributes water for residential, commercial, industrial, and fire prevention purposes. It also provides water treatment and pumping services to the Township of East Brunswick. Its other NJ subsidiaries offer water and wastewater services to residents in Southampton Township. Its Delaware subsidiaries provide water services to retail customers in New Castle, Kent, and Sussex counties. In November, the company announced the acquisition of the assets of Twin Lakes Water Services, Inc., which serves approximately 330 people in Shohola, Pennsylvania. Has 269 employees. Chairman: J. Richard Tompkins. Address: 1500 Ronson Rd, P.O. BOX 1500, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: http://www.middlesexwater.com .																			
5 Yrs. 1 Yr.														W.T.																			
Sales 1.5% 4.5%																																	
"Cash Flow" 4.5% 2.5%																																	
Earnings 5.5% 2.5%																																	
Dividends 2.0% 1.5%																																	
Book Value 6.5% 2.5%																																	
Fiscal Year																																	
1Q 2Q 3Q 4Q																																	
12/31/07 19.0 21.8 24.1 21.2 86.1																																	
12/31/08 20.8 23.0 25.7 21.5 91.0																																	
12/31/09 20.6 23.1 25.5																																	
12/31/10																																	
Fiscal Year																																	
1Q 2Q 3Q 4Q																																	
12/31/06 .15 .25 .28 .14 .82																																	
12/31/07 .13 .24 .31 .19 .87																																	
12/31/08 .15 .26 .35 .13 .89																																	
12/31/09 .10 .21 .29 .10																																	
12/31/10 .08 .22																																	
Cal-endar																																	
1Q 2Q 3Q 4Q																																	
2007 .173 .173 .173 .175 .69																																	
2008 .175 .175 .175 .178 .70																																	
2009 .178 .178 .178 .18 .71																																	
2010																																	
INSTITUTIONAL DECISIONS														TOTAL SHAREHOLDER RETURN																			
1Q'09 2Q'09 3Q'09														Dividends plus appreciation as of 12/31/2009																			
to Buy 41 41 30														3 Mos. 6 Mos. 1 Yr. 3 Yrs. 5 Yrs.																			
to Sell 27 33 28														18.15% 24.79% 7.19% 5.45% 11.94%																			
Hld's(000) 4505 4902 4958																																	

YORK WATER CO				NDQ-YORW		RECENT PRICE 14.08		TRAILING P/E RATIO 21.3		RELATIVE P/E RATIO 1.19		DIV'D YLD 3.6%		VALUE LINE	
RANKS				10.22	13.45	13.49	14.03	17.87	20.99	18.55	16.50	17.95	High		
				5.67	8.20	9.33	11.00	11.67	15.33	15.45	6.23	9.74	Low		
PERFORMANCE 3 Average				<div>LEGENDS</div> <div>— 12 Mos Mov Avg</div> <div>... Rel Price Strength</div> <div>2-for-1 split 5/02</div> <div>3-for-2 split 9/06</div> <div>Shaded area indicates recession</div> 										18	
Technical 3 Average														13	
SAFETY 3 Average														8	
BETA .65 (1.00 = Market)														5	
Financial Strength B+				4											
Price Stability 85				3											
Price Growth Persistence 55				2											
Earnings Predictability 95				350											
				VOL. (thous.)											
© VALUE LINE PUBLISHING, INC.				2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011		
REVENUES PER SH				2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	--			
"CASH FLOW" PER SH				.59	.57	.65	.65	.79	.77	.86	.88	--			
EARNINGS PER SH				.43	.40	.47	.49	.56	.58	.57	.57	.66 ^{A,B}	.66 ^C /NA		
DIV'D DECL'D PER SH				.34	.35	.37	.39	.42	.45	.48	.49	--			
CAP'L SPENDING PER SH				.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	--			
BOOK VALUE PER SH				3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	--			
COMMON SHS OUTST'G (MILL)				9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	--			
AVG ANN'L P/E RATIO				17.9	26.9	24.5	25.7	26.3	31.2	30.3	24.6	21.3	21.3/NA		
RELATIVE P/E RATIO				.92	1.47	1.40	1.36	1.39	1.68	1.61	1.48	--			
AVG ANN'L DIV'D YIELD				4.3%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	--			
REVENUES (\$MILL)				19.4	19.6	20.9	22.5	26.8	28.7	31.4	32.8	--	Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.		
NET PROFIT (\$MILL)				4.0	3.8	4.4	4.8	5.8	6.1	6.4	6.4	--			
INCOME TAX RATE				35.8%	34.9%	34.8%	36.7%	36.7%	34.4%	36.5%	36.1%	--			
AFUDC % TO NET PROFIT				2.2%	3.7%	--	--	--	7.2%	3.6%	10.1%	--			
LONG-TERM DEBT RATIO				47.7%	46.7%	43.4%	42.5%	44.1%	48.3%	46.5%	54.5%	--			
COMMON EQUITY RATIO				52.3%	53.3%	56.6%	57.5%	55.9%	51.7%	53.5%	45.5%	--			
TOTAL CAPITAL (\$MILL)				68.6	69.9	69.0	83.6	90.3	126.5	125.7	153.4	--			
NET PLANT (\$MILL)				102.3	106.7	116.5	140.0	155.3	174.4	191.6	211.4	--			
RETURN ON TOTAL CAP'L				7.9%	7.4%	8.5%	7.6%	8.4%	6.2%	6.7%	5.7%	--			
RETURN ON SHR. EQUITY				11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	--			
RETURN ON COM EQUITY				11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	--			
RETAINED TO COM EQ				2.5%	1.3%	2.6%	2.1%	3.0%	2.2%	1.7%	1.4%	--			
ALL DIV'DS TO NET PROF				78%	88%	77%	79%	74%	77%	82%	85%	--			
^A No. of analysts changing eam. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 7.5% per year. ^B Based upon 4 analysts' estimates. ^C Based upon 4 analysts' estimates.															
ANNUAL RATES															
of change (per share) 5 Yrs. 1 Yr.															
Revenues 5.5% 3.5%															
"Cash Flow" 7.0% 3.5%															
Earnings 6.0% --															
Dividends 6.0% 3.0%															
Book Value 9.0% 3.0%															
ASSETS (\$mill.) 2007 2008 9/30/09															
Cash Assets .0 .0 .1															
Receivables 5.2 5.9 5.7															
Inventory (Avg cost) .8 .7 .8															
Other .8 .7 1.1															
Current Assets 6.8 7.3 7.7															
Property, Plant & Equip, at cost 223.1 246.0 --															
Accum Depreciation 31.5 34.6 --															
Net Property 191.6 211.4 220.9															
Other 12.6 21.7 21.3															
Total Assets 211.0 240.4 249.9															
LIABILITIES (\$mill.)															
Accts Payable 3.2 2.0 2.6															
Debt Due 15.0 8.7 9.3															
Other 3.2 3.5 4.3															
Current Liab 21.4 14.2 16.2															
LONG-TERM DEBT AND EQUITY as of 9/30/09															
Total Debt \$83.3 mill. Due in 5 Yrs. NA															
LT Debt \$74.0 mill.															
Including Cap. Leases NA (47% of Cap'l)															
Leases, Uncapitalized Annual rentals NA															
Pension Liability \$9.8 mill. in '08 vs. \$4.0 mill. in '07															
Pfd Stock None Pfd Div'd Paid None															
Common Stock 12,411,181 shares (53% of Cap'l)															
INSTITUTIONAL DECISIONS															
1Q'09 2Q'09 3Q'09															
to Buy 17 30 35															
to Sell 10 12 16															
Hld's(000) 1958 2477 2941															
TOTAL SHAREHOLDER RETURN															
Dividends plus appreciation as of 12/31/2009															
3 Mos. 6 Mos. 1 Yr. 3 Yrs. 5 Yrs.															
5.61% -3.72% 24.34% -10.37% 30.61%															

AGL RESOURCES NYSE-AGL						RECENT PRICE	37.00	P/E RATIO	12.5 (Trailing: 12.8 Median: 14.0)	RELATIVE P/E RATIO	0.74	DIV'D YLD	4.8%	VALUE LINE					
TIMELINESS	3	Raised 2/12/10	High: 23.4	23.2	24.5	25.0	29.3	33.7	39.3	40.1	44.7	39.1	37.5	37.2		Target Price	Range		
SAFETY	2	New 7/27/09	Low: 15.6	15.5	19.0	17.3	21.9	26.5	32.0	34.4	35.2	24.0	24.0	34.3		2013	2014		
TECHNICAL	3	Lowered 2/12/10	LEGENDS 1.10 x Dividends p sh divided by Interest Rate Relative Price Strength Options: Yes Shaded area: prior recession Latest recession began 12/07																
BETA	.75	(1.00 = Market)																	
2013-15 PROJECTIONS																			
Price	60	Gain (+60%)	Ann'l Total Return	13%	5%														
High	65	Low	40	20	10														
Insider Decisions																			
A	M	J	A	S	O	N	D												
to Buy	0	0	0	0	0	0	0												
Options	0	1	0	0	0	1	1												
to Sell	0	2	0	1	0	0	2												
Institutional Decisions																			
10/2009	20/2009	30/2009	Percent shares traded	18	12	6													
to Buy	110	124	112																
to Sell	107	96	99																
Hid's(000)	45714	45662	45741																
1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC. 13-15	
23.59	19.32	21.91	22.75	23.36	18.71	11.25	19.04	15.32	15.25	23.89	34.98	33.73	32.64	36.41	29.90	34.35	36.10	Revenues per sh ^A	40.35
2.24	2.33	2.49	2.42	2.65	2.29	2.86	3.31	3.39	3.47	3.29	4.20	4.50	4.65	4.68	5.95	5.05	5.30	"Cash Flow" per sh	5.75
1.17	1.33	1.37	1.37	1.41	.91	1.29	1.50	1.82	2.08	2.28	2.48	2.72	2.72	2.71	2.89	2.95	3.10	Earnings per sh ^{A B}	3.40
1.04	1.04	1.06	1.08	1.08	1.08	1.08	1.08	1.08	1.11	1.15	1.30	1.48	1.64	1.68	1.72	1.76	1.80	Div'ds Decl'd per sh ^C	1.92
2.37	2.17	2.37	2.59	2.05	2.51	2.92	2.83	3.30	2.46	3.44	3.44	3.26	3.39	4.84	6.15	4.45	4.50	Cap'l Spending per sh	5.30
10.19	10.12	10.56	10.99	11.42	11.59	11.50	12.19	12.52	14.66	18.06	19.29	20.71	21.74	21.48	22.95	24.10	25.45	Book Value per sh ^D	29.95
50.86	55.02	55.70	56.60	57.30	57.10	54.00	55.10	56.70	64.50	76.70	77.70	77.70	76.40	76.90	77.50	78.50	79.00	Common Shs Outst'g ^E	80.50
15.1	12.6	13.8	14.7	13.9	21.4	13.6	14.6	12.5	12.5	13.1	14.3	13.5	14.7	12.3	11.1	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	15.0
.99	.84	.86	.85	.72	1.22	.88	.75	.68	.71	.69	.76	.73	.78	.74	.73			Relative P/E Ratio	1.00
5.9%	6.2%	5.6%	5.4%	5.5%	5.5%	6.2%	4.9%	4.7%	4.3%	3.9%	3.7%	4.0%	4.1%	5.0%	5.4%			Avg Ann'l Div'd Yield	3.8%
CAPITAL STRUCTURE as of 12/31/09						607.4	1049.3	868.9	983.7	1832.0	2718.0	2621.0	2494.0	2800.0	2317.0	2695	2850	Revenues (\$mill) ^A	3250
Total Debt \$2576.0 mill. Due in 5 Yrs \$543.0 mill.						71.1	82.3	103.0	132.4	153.0	193.0	212.0	211.0	207.6	260	230	245	Net Profit (\$mill)	275
LT Debt \$1974.0 mill. LT Interest \$90.0 mill.						34.3%	40.7%	36.0%	35.9%	37.0%	37.7%	37.8%	37.6%	40.5%	30.0%	35.0%	35.0%	Income Tax Rate	38.0%
(Total interest coverage: 4.5x)						11.7%	7.8%	11.9%	13.5%	8.4%	7.1%	8.1%	8.5%	7.4%	11.2%	8.6%	8.6%	Net Profit Margin	8.4%
Leases, Uncapitalized Annual rentals \$28.0 mill.						45.9%	61.3%	58.3%	50.3%	54.0%	51.9%	50.2%	50.2%	50.3%	53.0%	54.0%	52.0%	Long-Term Debt Ratio	51.0%
Pension Assets-12/09 \$303.0 mill.						48.3%	38.7%	41.7%	49.7%	46.0%	48.1%	49.8%	49.8%	49.7%	48.0%	50.0%	48.0%	Common Equity Ratio	49.0%
Oblig. \$463.0 mill.						1286.2	1736.3	1704.3	1901.4	3008.0	3114.0	3231.0	3335.0	3327.0	3750	3800	4200	Total Capital (\$mill)	4900
Pfd Stock None						1637.5	2058.9	2194.2	2352.4	3178.0	3271.0	3436.0	3566.0	3816.0	2900	3080	3250	Net Plant (\$mill)	3900
Common Stock 77,543,821 shs. as of 1/29/10						7.4%	6.5%	8.1%	8.9%	6.3%	7.9%	8.0%	7.7%	7.4%	7.0%	7.0%	7.0%	Return on Total Cap'l	6.5%
MARKET CAP: \$2.9 billion (Mid Cap)						10.2%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	12.6%	14.5%	12.0%	12.0%	Return on Shr. Equity	11.0%
CURRENT POSITION 2007 2008 12/31/09						11.5%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	12.6%	14.5%	12.0%	12.0%	Return on Com Equity	11.0%
(\$MILL.)						3.2%	4.2%	7.0%	6.6%	5.6%	6.2%	6.3%	5.3%	5.1%	7.0%	5.0%	5.5%	Retained to Com Eq	5.0%
Cash Assets						72%	65%	52%	53%	49%	52%	52%	58%	60%	50%	58%	57%	All Div'ds to Net Prof	55%
Other																			
Current Assets																			
Accts Payable																			
Debt Due																			
Other																			
Current Liab.																			
Fix. Chg. Cov.																			
ANNUAL RATES of change (per sh)						Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '13-'15											
Revenues						4.0%	15.5%	2.5%											
"Cash Flow"						6.0%	6.5%	3.0%											
Earnings						7.0%	8.5%	3.5%											
Dividends						4.0%	8.0%	2.5%											
Book Value						7.0%	10.0%	5.0%											
Cal-endar	QUARTERLY REVENUES (\$ mill.)				Full Year														
	Mar.31	Jun.30	Sep.30	Dec.31															
2007	973	467	369	685	2494														
2008	1012	444	539	805	2800														
2009	995	377	307	638	2317														
2010	1020	450	475	750	2695														
2011	1075	475	500	800	2850														
Cal-endar	EARNINGS PER SHARE ^B				Full Year														
	Mar.31	Jun.30	Sep.30	Dec.31															
2007	1.29	.40	.17	.86	2.72														
2008	1.16	.30	.28	.97	2.71														
2009	1.55	.26	.16	.92	2.89														
2010	1.50	.30	.25	.90	2.95														
2011	1.41	.36	.33	1.00	3.10														
Cal-endar	QUARTERLY DIVIDENDS PAID ^C				Full Year														
	Mar.31	Jun.30	Sep.30	Dec.31															
2006	.37	.37	.37	.37	1.48														
2007	.41	.41	.41	.41	1.64														
2008	.42	.42	.42	.42	1.68														
2009	.43	.43	.43	.43	1.72														
2010	.44																		

BUSINESS: AGL Resources Inc. is a public utility holding company. Its distribution subsidiaries include Atlanta Gas Light, Chattanooga Gas, Elizabethtown Gas and Virginia Natural Gas. The utilities have more than 2.3 million customers in Georgia, Virginia, Tennessee, New Jersey, Florida, and Maryland. Engaged in non-regulated natural gas marketing and other allied services. Deregulated natural gas marketing and

[illegible]

<p>(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '00, 12¢; '03, d17¢; '06, d18¢; '07, d2¢; '09, 12¢. Next exs. rpt. due early May. (C) Dividends historically paid in</p>	<p>early March, June, Sept., and Dec. ■ Div. reinvestment plan. Direct stock purchase plan avail. (D) In millions.</p>	<p>(E) Qtrs may not add due to change in shrs outstanding.</p>
<p>© 2010, Value Line Publishing, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.</p>		

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	50
Earnings Predictability	90

To subscribe call 1-800-833-0046.

DELTA NAT. GAS				NDQ--DGAS		RECENT PRICE		29.55		TRAILING P/E RATIO		19.2		RELATIVE P/E RATIO		1.06		DIV'D YLD		4.4%		VALUE LINE															
RANKS				20.99 17.69		23.08 18.50		24.10 21.00		28.75 22.02		30.00 23.60		26.82 24.11		26.08 23.50		32.19 11.70		29.80 18.46		30.00 27.96		High Low													
PERFORMANCE 3				Average		LEGENDS																		45													
Technical 3				Average		— 12 Mos Mov Avg																		30													
SAFETY 2				Above Average	 Rel Price Strength																		22.5													
BETA .65				(1.00 = Market)		Shaded area indicates recession																		13													
Financial Strength				B+																				9													
Price Stability				95																				6													
Price Growth Persistence				50																				4													
Earnings Predictability				70																				3													
© VALUE LINE PUBLISHING, INC.				2001		2002		2003		2004		2005		2006		2007		2008		2009		2010/2011															
SALES PER SH				28.36		22.11		21.59		24.74		26.06		36.01		29.96		34.18		31.84																	
"CASH FLOW" PER SH				3.08		3.16		2.65		2.65		2.86		2.94		3.19		3.49		2.89																	
EARNINGS PER SH				1.47		1.45		1.49		1.20		1.55		1.55		1.62		2.08		1.58		1.65 A,B/NA															
DIV'DS DECL'D PER SH				1.14		1.16		1.18		1.18		1.18		1.20		1.22		1.24		1.28																	
CAP'L SPENDING PER SH				2.83		3.72		2.90		2.80		1.65		2.39		2.47		1.69		2.54																	
BOOK VALUE PER SH				13.12		13.51		14.49		15.26		15.73		16.16		16.61		17.48		17.78																	
COMMON SHS OUTST'G (MILL)				2.50		2.53		3.17		3.20		3.23		3.26		3.28		3.30		3.32																	
AVG ANN'L P/E RATIO				12.3		14.1		14.5		20.1		16.8		16.9		15.5		12.3		15.0		17.9/NA															
RELATIVE P/E RATIO				.63		.77		.83		1.06		.89		.91		.82		.74		.99																	
AVG ANN'L DIV'D YIELD				6.3%		5.7%		5.5%		4.9%		4.5%		4.6%		4.9%		4.9%		5.4%																	
SALES (\$MILL)				70.8		55.9		68.4		79.2		84.2		117.3		98.2		112.7		105.6		Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.															
OPERATING MARGIN				23.2%		29.3%		24.7%		21.2%		21.9%		16.2%		20.4%		19.6%		18.0%																	
DEPRECIATION (\$MILL)				4.0		4.4		4.5		4.7		4.3		4.6		5.2		4.7		4.4																	
NET PROFIT (\$MILL)				3.6		3.6		3.9		3.8		5.0		5.0		5.3		6.8		5.2																	
INCOME TAX RATE				38.0%		38.2%		38.0%		38.1%		38.3%		36.6%		37.3%		37.8%		36.6%																	
NET PROFIT MARGIN				5.1%		6.5%		5.8%		4.8%		5.9%		4.3%		5.4%		6.1%		4.9%																	
WORKING CAP'L (\$MILL)				d12.6		d15.3		d.2		d.7		.9		4.6		5.1		8.2		5.5																	
LONG-TERM DEBT (\$MILL)				49.3		48.6		53.4		53.0		52.7		58.8		58.6		58.3		57.6																	
SHR. EQUITY (\$MILL)				32.8		34.2		45.9		48.8		50.8		52.6		54.4		57.6		59.0																	
RETURN ON TOTAL CAP'L				6.7%		6.6%		5.9%		5.6%		6.7%		6.7%		6.3%		7.6%		6.2%																	
RETURN ON SHR. EQUITY				11.1%		10.6%		8.6%		7.9%		9.8%		9.5%		9.7%		11.9%		8.8%																	
RETAINED TO COM EQ				2.5%		2.1%		1.6%		.2%		2.4%		2.1%		2.4%		4.8%		1.7%																	
ALL DIV'DS TO NET PROF				78%		80%		81%		98%		76%		77%		75%		60%		81%																	
*No. of analysts changing earn. est. in last 27 days: 0 up, 0 down, consensus 5-year earnings growth 3.0% per year. ^B Based upon one analyst's estimate.																																					
ANNUAL RATES						ASSETS (\$mill.)						2008		2009		12/31/09		INDUSTRY: Natural Gas (Div.)																			
of change (per share)						5 Yrs.						1 Yr.						Cash Assets						.3		.1		BUSINESS: Delta Natural Gas Company, Inc. sells natural gas to approximately 37,000 retail customers on its distribution system in central and southeastern Kentucky. Its Regulated segment sells natural gas to its retail customers, primarily in 23 rural counties. This segment also transports gas to industrial customers on its system who purchase gas in the open market, as well as transports gas on behalf of local producers not on its distribution system. The company's Non Regulated segment purchases natural gas on the open market and from Kentucky producers, and resells this gas to industrial customers on its distribution system and to others not on its system. This segment also produces natural gas that is sold to Delgasco for resale. As of June 30, the company owned approximately 2,500 miles of natural gas gathering, transmission, distribution, storage, and service lines, as well as interests in oil and gas leases on 10,300 acres in Bell, Knox, and Whitley counties. Has 155 employees. Chairman, C.E.O. & President: Glenn R. Jennings, Inc.: KY. Address: 3617 Lexington Road, Winchester, KY 40391. Tel.: (859) 744-6171. Internet: http://www.deltagas.com . L. Y.									
Sales						7.0%						-7.0%						Receivables						11.4		4.1										12.7	
"Cash Flow"						2.5%						-17.0%						Inventory (Avg cost)						15.0		10.4										11.5	
Earnings						5.0%						-24.0%						Other						7.3		4.8										6.9	
Dividends						1.0%						3.0%						Current Assets						34.0		19.4										31.2	
Book Value						3.5%						2.0%																									
Fiscal Year		QUARTERLY SALES (\$mill.)				Full Year		Property, Plant & Equip, at cost						192.1		199.3		--		TOTAL SHAREHOLDER RETURN Dividends plus appreciation as of 2/28/2010																	
		1Q				2Q		Accum Depreciation						67.7		70.7		--																			
06/30/07		13.1				28.4		Net Property						124.4		128.6		129.2																			
06/30/08		12.4				29.3		Other						12.4		14.5		14.6																			
06/30/09		18.1				33.9		Total Assets						170.8		162.5		175.0																			
06/30/10		8.1				21.1																															
Fiscal Year		EARNINGS PER SHARE				Full Year		LIABILITIES (\$mill.)						12.2		4.7		6.3																			
		1Q				2Q		Accts Payable						8.0		4.9		13.2																			
06/30/06		d.18				.89		Debt Due						5.6		4.3		4.4																			
06/30/07		d.16				.73		Current Liab						25.8		13.9		23.9																			
06/30/08		d.25				.75																															
06/30/09		.08				.37																															
06/30/10		d.17				.58																															
Cal-endar		QUARTERLY DIVIDENDS PAID				Full Year		LONG-TERM DEBT AND EQUITY as of 12/31/09						Total Debt \$70.5 mill.						Due in 5 Yrs. NA																	
		1Q				2Q		LT Debt \$57.3 mill.						LT Debt \$57.3 mill.						(49% of Cap'l)																	
2007		.305				.305		Including Cap. Leases NA						Leases, Uncapitalized Annual rentals NA																							
2008		.31				.31																															
2009		.32				.32																															
2010		.325				.325																															
INSTITUTIONAL DECISIONS														Pension Liability \$4 mill. in '09 vs. None in '08																							
		1Q'09				2Q'09				3Q'09				Pfd Stock None						Pfd Div'd Paid None																	
to Buy		8				9				11				Common Stock 3,327,573 shares						(51% of Cap'l)																	
to Sell		9				9				6																											
Hld's(000)		615				568				588																											

<p>(A) Fiscal year ends Sept. 30th.</p> <p>(B) Based on average shares outstanding thru '97, then diluted. Excludes nonrecurring loss: '06, '76. Excludes gain from discontinued operation.</p>	<p>ations: '08, 94¢. Next earnings report due late April. (C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred</p>	<p>charges. In '09: \$488.3 mill., \$22.03/sh. (E) In millions. (F) Qty. eggs. may not sum due to rounding or change in shares outstanding.</p>
---	--	---

NEW JERSEY RES. NYSE-NJR						RECENT PRICE	37.33	P/E RATIO	14.4	(Trailing: 16.4 Median: 15.0)	RELATIVE P/E RATIO	0.85	DIV'D YLD	3.6%	VALUE LINE													
TIMELINESS	4	Lowered 10/9/09	High:	18.3	19.8	21.7	22.4	26.4	29.7	32.9	35.4	37.6	41.1	42.4	38.6		Target Price	2013	2014	2015								
SAFETY	1	Raised 9/15/06	Low:	14.9	16.1	16.6	16.2	20.0	24.3	27.1	27.7	30.3	24.6	30.0	33.5													
TECHNICAL	2	Raised 2/12/10	LEGENDS																									
BETA	.65	(1.00 = Market)	1.40 x Dividends p sh divided by Interest Rate 3-for-2 split 3/02 3-for-2 split 3/08 Options: Yes Shaded area: prior recession Latest recession began 12/07																									
2013-15 PROJECTIONS			3-for-2																									
	Price	Gain	Ann'l Total																									
	Low	40	(+35%)	Return																								
	High	50	(+5%)	6%																								
Insider Decisions			3-for-2																									
	A	M	J	J	A	S	O	N	D																			
to Buy	0	1	0	0	0	0	0	0	0																			
Options	0	0	0	0	3	0	0	0	0																			
to Sell	0	0	0	0	4	0	0	0	1																			
Institutional Decisions			3-for-2																									
	1Q2009	2Q2009	3Q2009																									
to Buy	87	89	71	Percent	12																							
to Sell	88	88	76	shares	8																							
Net's (000)	23324	24695	24351	traded	4																							
1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUBL. INC.				13-15						
12.81	11.36	13.48	17.31	17.73	22.65	29.42	51.22	44.11	62.29	60.89	76.19	79.63	72.62	90.74	62.34	65.50	73.15	Revenues per sh ^A				79.55						
1.54	1.42	1.48	1.63	1.74	1.86	1.99	2.12	2.14	2.38	2.50	2.62	2.73	2.44	3.62	3.16	3.50	3.75	"Cash Flow" per sh				3.20						
.84	.86	.92	.99	1.04	1.11	1.20	1.30	1.39	1.59	1.70	1.77	1.87	1.55	2.70	2.40	2.60	2.75	Earnings per sh ^B				3.20						
.68	.68	.69	.71	.73	.75	.76	.78	.80	.83	.87	.91	.96	1.01	1.11	1.24	1.36	1.45	Div'ds Decl'd per sh ^C				1.52						
1.40	1.18	1.19	1.15	1.07	1.21	1.23	1.10	1.02	1.14	1.45	1.28	1.28	1.46	1.72	1.81	1.80	1.95	Cap'l Spending per sh				2.00						
6.43	6.47	6.73	6.92	7.26	7.57	8.29	8.80	8.71	10.26	11.25	10.60	15.00	15.50	17.28	16.59	17.50	17.65	Book Value per sh ^D				19.45						
38.93	40.03	40.69	40.23	40.07	39.92	39.59	40.00	41.50	40.85	41.61	41.32	41.44	41.61	42.06	41.59	42.00	41.00	Common Shs Outst'g ^E				40.00						
13.0	11.8	13.6	13.5	15.3	15.2	14.7	14.2	14.7	14.0	15.3	16.8	16.1	21.6	12.3	14.9	Bold figures are		Avg Ann'l P/E Ratio				14.0						
.85	.79	.85	.78	.80	.87	.96	.73	.80	.80	.81	.89	.87	1.15	.74	.98	Value Line		Relative P/E Ratio				.95						
6.2%	6.7%	5.6%	5.3%	4.6%	4.5%	4.4%	4.2%	3.9%	3.7%	3.3%	3.1%	3.2%	3.0%	3.3%	3.5%	estimates		Avg Ann'l Div'd Yield				3.8%						
CAPITAL STRUCTURE as of 12/31/09						1164.5	2048.4	1830.8	2544.4	2533.6	3148.3	3299.6	3021.8	3816.2	2592.5	2750	3000	Revenues (\$mill) ^A				3185						
Total Debt \$666.4 mill. Due in 5 Yrs \$157.7 mill.						47.9	52.3	56.8	65.4	71.6	74.4	78.5	65.3	113.9	101.0	110	115	Net Profit (\$mill)				125						
LT Debt \$438.4 mill. LT Interest \$15.8 mill.						37.8%	38.0%	38.7%	39.4%	39.1%	39.1%	38.9%	38.8%	37.8%	37.1%	30.0%	35.0%	Income Tax Rate				40.0%						
Incl. \$9.9 mill. capitalized leases.						4.1%	2.6%	3.1%	2.6%	2.8%	2.4%	2.4%	2.2%	3.0%	2.9%	4.0%	4.0%	Net Profit Margin				4.0%						
(LT interest earned: 7.5%; total interest coverage: 7.5x)						47.0%	50.1%	50.6%	38.1%	40.3%	42.0%	34.8%	37.3%	38.5%	39.8%	41.5%	42.0%	Long-Term Debt Ratio				42.5%						
Pension Assets-9/08 \$100.6 mill.						52.9%	49.9%	49.4%	61.9%	59.7%	58.0%	65.2%	62.7%	61.5%	60.2%	58.5%	58.0%	Common Equity Ratio				57.5%						
Oblig. \$133.8 mill.						620.1	706.2	732.4	676.8	783.8	755.3	954.0	1028.0	1182.1	1144.8	1260	1250	Total Capital (\$mill)				1350						
Pfd Stock None						730.6	743.9	756.4	852.6	880.4	905.1	934.9	970.9	1017.3	1054.4	1085	1100	Net Plant (\$mill)				1150						
Common Stock 41,417,220 shs.						9.0%	8.5%	8.7%	10.7%	10.1%	11.2%	9.6%	7.7%	10.7%	9.7%	9.5%	10.0%	Return on Total Cap'l				10.5%						
as of 2/2/10						14.6%	14.8%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	14.6%	15.0%	16.0%	Return on Shr. Equity				16.5%						
MARKET CAP: \$1.5 billion (Mid Cap)						14.6%	14.9%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	14.6%	15.0%	16.0%	Return on Com Equity				16.5%						
CURRENT POSITION						5.4%	6.1%	6.9%	7.7%	7.8%	8.5%	6.3%	3.6%	9.5%	7.2%	7.0%	7.5%	Retained to Com Eq				8.5%						
2008						63%	59%	56%	51%	49%	50%	50%	64%	40%	50%	52%	52%	All Div'ds to Net Prof				48%						
2009																												
12/31/09																												
(\$mill.)																												
Cash Assets						42.6	36.2	10.3																				
Other						1067.1	648.0	777.9																				
Current Assets						1109.7	684.2	788.2																				
Accts Payable						61.7	44.4	34.8																				
Debt Due						238.3	149.9	228.0																				
Other						594.0	361.9	373.6																				
Current Liab.						894.0	556.2	636.4																				
Fix. Chg. Cov.						780%	711%	700%																				
ANNUAL RATES																												
of change (per sh)																												
10 Yrs.																												
Revenues						14.5%	6.0%	1.5%																				
"Cash Flow"						6.0%	5.5%	5.5%																				
Earnings						8.0%	7.5%	6.5%																				
Dividends						4.5%	6.0%	5.5%																				
Book Value						8.5%	10.5%	4.5%																				
QUARTERLY REVENUES (\$mill.) ^A																												
Fiscal Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year																							
2007	737.4	1029	662.2	593.2	3021.8																							
2008	811.1	1178	1000	827.1	3816.2																							
2009	801.3	937.5	441.1	412.6	2592.5																							
2010	609.6	925	615.4	600	2750																							
2011	670	990	680	660	3000																							
EARNINGS PER SHARE ^{A B}																												
Fiscal Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year																							
2007	.70	.19	.60	.06	1.55 ^F																							
2008	1.31	1.86	.d10	d.39	2.70																							
2009	.77	1.71	.d3	d.12	2.40																							
2010	.66	1.85	.10	d.01	2.60																							
2011	.70	1.90	.15	Nil	2.75																							
QUARTERLY DIVIDENDS PAID ^{C E}																												
Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year																							
2006	.24	.24	.24	.24	.96																							
2007	.253	.253	.253	.253	1.01																							
2008	.267	.28	.28	.28	1.11																							
2009	.31	.31	.31	.31	1.24																							
2010	.34																											

Business: New Jersey Resources Corp. is a holding company providing retail/wholesale energy svcs. to customers in New Jersey, and in states from the Gulf Coast to New England, and Canada. New Jersey Natural Gas had about 486,529 customers at 9/30/09 in Monmouth and Ocean Counties, and other N.J. Counties. Fiscal 2009 volume: 133 bill. cu. ft. (5% firm, 95% interruptible industrial and electric utility, 3% off-system and capacity release). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2009 dep. rate: 2.2%. Has 613 empis. Off./dir. own about 1.5% of common (12/09 Proxy). Chrmn., CEO, & Pres.: Laurence M. Downes, Inc.: NJ Addr.: 1415 Wyckoff Road, Wall, NJ 07719. Tel.: 732-938-1480. Web: www.njresources.com.

New Jersey Resources posted lower-than-expected top-and-bottom-line results for the December interim. Both the utility and nonutility operations experienced declining revenues. This stemmed from lower transportation volumes, and weak demand as a result of oversupply, particularly in the Northeast. However, strategic initiatives helped to reduce expenses and moderate the effects of diminished volumes on profitability. Those cost cuts boosted contributions from the New Jersey Natural Gas (NJNG) unit. And the mid-stream asset division got a significant boost in earnings, reflecting the commencing of operations at the Steckman Ridge facility. Still, coupled with a weak showing at the NJR Energy Services unit, the bottom line fell 14.3% during the first fiscal quarter of 2010. However, **We have left our 2010 earnings estimate unchanged for the time being.** Solid contributions from NJNG as a result of new customer accounts (about 1,440 so far this year) and benefits from the Steckman Ridge storage facility are anticipated, putting our earnings target within reach. Also, we have introduced a 2011 share-net

estimate of \$2.75 a share. **The balance sheet is supportive.** Cash reserves fell almost 72% during the December period. This was likely a result of stock and debt repurchases. Over that timeframe, the board of directors voted to increase the existing share-repurchase agreement by two million shares, bringing the total authorization to 8.75 million. Since the inception of the plan in 1996, NJR has bought back about 6.5 million shares. Meantime, the company trimmed its debt load roughly 4%. This move should help to minimize interest expenses. **These shares may appeal to income-seeking accounts,** due to a recent dividend hike. Too, the top rank for Safety and high mark for Price Stability will probably appease even the most conservative investors. However, the recent sideways price movement and lackluster earnings figures have resulted in a below-average Timeliness rank. Thus, we look for NJR to lag the broader market in the year ahead. Growth in new hook-ups is still positive, but is slower than it was during last decade's real estate boom.

Bryan J. Fong *March 12, 2010*

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	70
Earnings Predictability	90

PIEDMONT NAT'L. GAS NYSE-PNY										RECENT PRICE	26.38	P/E RATIO	16.0	(Trailing: 15.8 Median: 17.0)	RELATIVE P/E RATIO	0.94	DIV'D YLD	4.2%	VALUE LINE																	
TIMELINESS	3	Raised 6/15/07	High: 18.3	19.7	19.0	19.0	22.0	24.3	25.8	28.4	28.0	35.3	32.0	27.4					Target Price Range	2013	2014	2015														
SAFETY	2	New 7/27/90	Low: 14.3	11.8	14.6	13.7	16.6	19.2	21.3	23.2	22.0	21.7	20.7	23.9																						
TECHNICAL	2	Raised 2/12/10	LEGENDS 1.40 x Dividends p sh divided by Interest Rate Relative Price Strength 2-for-1 split 11/04 Options: Yes Shaded area: prior recession Latest recession began 12/07																																	
BETA	.65	(1.00 = Market)																																		
2013-15 PROJECTIONS																																				
Price	40	Gain (+50%)	15%																																	
Low	30	Gain (+15%)	8%																																	
Insider Decisions																																				
A	M	J	J	A	S	O	N	D																												
to Buy	0	0	0	0	0	0	0	0																												
Options	0	0	0	0	0	0	0	0																												
to Sell	0	0	0	0	0	0	0	0																												
Institutional Decisions																																				
1Q2009	2Q2009	3Q2009	Percent shares traded	7.5																																
to Buy	75	78	78	5																																
to Sell	123	96	82	2.5																																
Hld's (000)	34611	33567	33498																																	
1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC. 13-15																		
10.82	8.76	11.59	12.84	12.45	10.97	13.01	17.06	12.57	18.14	19.95	22.96	25.80	23.37	28.52	22.36	23.60	24.50	Revenues per sh ^A																		
1.13	1.25	1.49	1.62	1.72	1.70	1.77	1.81	1.81	2.04	2.31	2.43	2.51	2.64	2.77	3.01	2.90	2.95	"Cash Flow" per sh																		
.68	.73	.84	.93	.98	.93	1.01	1.01	.95	1.11	1.27	1.32	1.28	1.40	1.49	1.67	1.65	1.70	Earnings per sh ^{AB}																		
.51	.54	.57	.61	.64	.68	.72	.76	.80	.82	.85	.91	.95	.99	1.03	1.07	1.11	1.15	Div'ds Decl'd per sh ^{CM}																		
1.95	1.72	1.64	1.52	1.48	1.58	1.65	1.29	1.21	1.16	1.85	2.50	2.74	1.85	2.47	1.76	.65	.55	Cap'l Spending per sh																		
5.68	6.16	6.53	6.95	7.45	7.86	8.26	8.63	8.91	9.36	11.15	11.53	11.83	11.99	12.11	12.67	12.95	13.40	Book Value per sh ^D																		
53.15	57.67	59.10	60.39	61.48	62.59	63.83	64.93	66.18	67.31	76.67	76.70	74.61	73.23	73.26	73.27	72.00	71.50	Common Shs Outst'g ^E																		
15.7	13.8	13.9	13.6	16.3	17.7	14.3	16.7	18.4	16.7	16.6	17.9	19.2	18.7	18.2	15.4			Avg Ann'l P/E Ratio																		
1.03	.92	.87	.78	.85	1.01	.93	.86	1.01	.95	.88	.95	1.04	.99	1.10	1.02			Relative P/E Ratio																		
4.8%	5.4%	4.9%	4.8%	4.0%	4.1%	5.0%	4.5%	4.6%	4.4%	4.1%	3.8%	3.9%	3.8%	3.8%	4.1%			Avg Ann'l Div'd Yield																		
CAPITAL STRUCTURE as of 10/31/09						830.4	1107.9	832.0	1220.8	1529.7	1761.1	1924.6	1711.3	2089.1	1638.1	1700	1750	Revenues (\$mill) ^A																		
Total Debt \$1098.5 mill. Due in 5 Yrs \$220.0 mill.						64.0	65.5	62.2	74.4	95.2	101.3	97.2	104.4	110.0	122.8	119	120	Net Profit (\$mill)																		
LT Debt \$732.5 mill. LT Interest \$55.1 mill.						34.7%	34.6%	33.1%	34.8%	35.1%	33.7%	34.2%	33.0%	36.3%	28.5%	35.0%	35.0%	Income Tax Rate																		
(LT interest earned: 4.1x; total interest coverage: 3.5x)						7.7%	5.9%	7.5%	6.1%	6.2%	5.8%	5.0%	6.1%	5.3%	7.5%	7.0%	7.0%	Net Profit Margin																		
Pension Assets-10/09 \$184.3 mill.						46.1%	47.6%	43.9%	42.2%	43.6%	41.4%	48.3%	48.4%	47.2%	44.1%	44.5%	45.5%	Long-Term Debt Ratio																		
Oblig. \$195.3 mill.						53.9%	52.4%	56.1%	57.8%	56.4%	58.6%	51.7%	51.6%	52.8%	55.9%	55.5%	54.5%	Common Equity Ratio																		
Pfd Stock None						978.4	1069.4	1051.6	1090.2	1514.9	1509.2	1707.9	1703.3	1681.5	1660.5	1680	1760	Total Capital (\$mill)																		
Common Stock 73,295,803 shs. as of 12/11/09						1072.0	1114.7	1158.5	1812.3	1849.8	1939.1	2075.3	2141.5	2240.8	2304.4	2350	2375	Net Plant (\$mill)																		
MARKET CAP: \$1.9 billion (Mid Cap)						8.3%	7.9%	7.8%	8.6%	7.8%	8.2%	7.2%	7.8%	8.2%	9.1%	8.5%	8.5%	Return on Total Cap'l																		
CURRENT POSITION						12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	12.4%	13.2%	13.0%	12.5%	Return on Shr. Equity																		
2007						12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	12.4%	13.2%	13.0%	12.5%	Return on Com Equity																		
2008						3.5%	3.0%	1.7%	3.1%	3.7%	3.6%	2.8%	3.5%	3.9%	4.8%	4.0%	4.0%	Retained to Com Eq																		
2009						71%	75%	83%	74%	66%	68%	74%	70%	69%	64%	67%	67%	All Div'ds to Net Prof																		
2010						BUSINESS: Piedmont Natural Gas Company is primarily a regulated natural gas distributor, serving over 952,469 customers in North Carolina, South Carolina, and Tennessee. 2009 revenue mix: residential (48%), commercial (28%), industrial (8%), other (16%). Principal suppliers: Transco and Tennessee Pipeline. Gas costs: 65.7% of revenues. '09 deprec. rate: 3.4%. Estimated plant age: 8.4 years. Non-regulated operations: sale of gas-powered heating equipment; natural gas brokering; propane sales. Has about 1,821 employees. Officers & directors own about 1.3% of common stock (1/10 proxy). Chairman, CEO, & President: Thomas E. Skains, Inc. NC. Address: 4720 Piedmont Row Drive, Charlotte, NC 28210. Telephone: 704-364-3120. Internet: www.piedmontng.com.																														
ANNUAL RATES						Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09																												
of change (per sh)						7.5%	8.0%	2.0%																												
Revenues						5.5%	6.5%	2.5%																												
"Cash Flow"						5.0%	6.5%	4.0%																												
Earnings						5.0%	6.5%	4.0%																												
Dividends						5.0%	4.5%	3.5%																												
Book Value						5.0%	4.5%	3.0%																												
Fiscal Year Ends						Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year																										
2007						677.2	531.5	224.4	278.2	1711.3																										
2008						788.5	634.2	354.7	311.7	2089.1																										
2009						779.6	455.4	180.3	222.8	1638.1																										
2010						795	470	195	240	1700																										
2011						805	480	210	255	1750																										
Fiscal Year Ends						Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year																										
2007						.94	.69	d.12	d.11	1.40																										
2008						1.12	.66	d.10	d.18	1.49																										
2009						1.10	.73	d.10	d.06	1.67																										
2010						1.15	.75	d.10	d.15	1.65																										
2011						1.16	.77	d.09	d.14	1.70																										
Cal-endar						Quarterly Dividends Paid	Mar.31	Jun.30	Sep.30	Dec.31	Full Year																									
2006						.23	.24	.24	.24	.95																										
2007						.24	.25	.25	.25	.99																										
2008						.25	.26	.26	.26	1.03																										
2009						.26	.27	.27	.27	1.07																										
2010						.27																														

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	90
Earnings Predictability	85

To subscribe call 1-800-833-0046

SOUTHWEST GAS NYSE-SWX										RECENT PRICE	29.56	P/E RATIO	14.6 (Trailing: 14.9 Median: 19.0)	RELATIVE P/E RATIO	0.86	DIV'D YLD	3.4%	VALUE LINE								
TIMELINESS	3	Raised 5/23/08	High: 29.5	23.0	24.7	25.3	23.6	26.2	28.1	39.4	39.9	33.3	29.5	29.6				Target 2013	Price 2014	Range 2015						
SAFETY	3	Lowered 1/4/91	Low: 20.4	16.9	18.6	18.1	19.3	21.5	23.5	26.0	26.5	21.1	17.1	26.3												
TECHNICAL	2	Raised 2/26/10	LEGENDS																							
BETA	.75	(1.00 = Market)	Options: Yes																							
2013-15 PROJECTIONS																										
Price	50	Gain (+70%)	16%																							
Low	30	(Nil)	4%																							
Insider Decisions																										
A	M	J	J	A	S	O	N	D																		
to Buy	0	0	0	0	0	0	0	0	0																	
Options	0	0	0	0	0	0	0	2	2																	
to Sell	0	0	1	0	3	1	1	3	3																	
Institutional Decisions																										
1Q2009	2Q2009	3Q2009	Percent																							
to Buy	83	86	73	9																						
to Sell	71	71	68	6																						
Hlds(000)	32859	32802	33100	3																						
1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUBL., INC.		13-15						
28.16	23.03	24.09	26.73	30.17	30.24	32.61	42.98	39.68	35.96	40.14	43.59	48.47	50.28	48.53	42.00	42.95	44.70	Revenues per sh	56.00							
5.09	2.65	3.00	3.85	4.48	4.45	4.57	4.79	5.07	5.11	5.57	5.20	5.97	6.21	5.76	6.15	6.40	6.80	"Cash Flow" per sh	7.50							
1.22	.10	.25	.77	1.65	1.27	1.21	1.15	1.16	1.13	1.66	1.25	1.98	1.95	1.39	1.94	2.05	2.20	Earnings per sh A	2.65							
.80	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.86	.90	.95	1.00	1.05	Div'ds Decl'd per sh B	1.20							
6.64	6.79	8.19	6.19	6.40	7.41	7.04	8.17	8.50	7.03	8.23	7.49	8.27	7.96	6.79	4.80	5.65	6.40	Cap'l Spending per sh	8.50							
16.38	14.55	14.20	14.09	15.67	16.31	16.82	17.27	17.91	18.42	19.18	19.10	21.58	22.98	23.49	24.46	26.10	27.65	Book Value per sh	30.00							
21.28	24.47	26.73	27.39	30.41	30.99	31.71	32.49	33.29	34.23	36.79	39.33	41.77	42.81	44.19	45.09	46.00	47.00	Common Shs Outst'g C	50.00							
14.0	NMF	NMF	24.1	13.2	21.1	16.0	19.0	19.9	19.2	14.3	20.6	15.9	17.3	20.3	12.2	Bold figures are		Avg Ann'l P/E Ratio	15.0							
.92	NMF	NMF	1.39	.69	1.20	1.04	.97	1.09	1.09	.76	1.10	.86	.92	1.22	.80	Value Line		Relative P/E Ratio	1.00							
4.7%	5.4%	4.7%	4.4%	3.8%	3.1%	4.2%	3.8%	3.6%	3.8%	3.5%	3.2%	2.6%	2.6%	3.2%	4.0%	estimates		Avg Ann'l Div'd Yield	3.0%							
CAPITAL STRUCTURE as of 12/31/09						1034.1	1396.7	1320.9	1231.0	1477.1	1714.3	2024.7	2152.1	2144.7	1893.8	1975	2100	Revenues (\$mill)	2800							
Total Debt \$1270.7 mill. Due in 5 Yrs \$496.3 mill.						38.3	37.2	38.6	38.5	58.9	48.1	80.5	83.2	61.0	87.4	95.0	110	Net Profit (\$mill)	135							
LT Debt \$1269.4 mill. LT Interest \$85.0 mill.						26.2%	34.5%	32.8%	30.5%	34.8%	29.7%	37.3%	36.5%	40.1%	34.0%	35.0%	36.0%	Income Tax Rate	36.0%							
(Total interest coverage: 2.6x)						3.7%	2.7%	2.9%	3.1%	4.0%	2.8%	4.0%	3.9%	2.8%	4.6%	4.8%	5.2%	Net Profit Margin	4.8%							
Leases, Uncapitalized Annual rentals \$5.0 mill.						60.2%	56.2%	62.5%	66.0%	64.2%	63.8%	60.6%	58.1%	55.3%	53.5%	51.0%	50.0%	Long-Term Debt Ratio	48.5%							
Pension Assets-12/09 \$418.5 mill.						35.8%	39.6%	34.1%	34.0%	35.8%	36.2%	39.4%	41.9%	44.7%	46.5%	49.0%	50.0%	Common Equity Ratio	51.5%							
Oblig. \$648.6 mill.						1489.9	1417.6	1748.3	1851.6	1968.6	2076.0	2287.8	2349.7	2323.3	2372.0	2450	2600	Total Capital (\$mill)	2925							
Pfd Stock None						1686.1	1825.6	1979.5	2175.7	2336.0	2489.1	2668.1	2845.3	2983.3	3034.5	3125	3200	Net Plant (\$mill)	3600							
Common Stock 45,228,164 shs.						4.6%	5.1%	4.3%	4.2%	5.0%	4.3%	5.5%	5.5%	4.5%	5.5%	6.0%	6.0%	Return on Total Cap'l	6.5%							
as of 2/17/10						6.5%	6.0%	5.9%	6.1%	8.3%	6.4%	8.9%	8.5%	5.9%	7.9%	8.0%	8.5%	Return on Shr. Equity	9.0%							
MARKET CAP: \$1.3 billion (Mid Cap)						7.2%	6.6%	6.5%	6.1%	8.3%	6.4%	8.9%	8.5%	5.9%	7.9%	8.0%	8.5%	Return on Com Equity	9.0%							
CURRENT POSITION						2.4%	1.9%	1.9%	1.7%	4.3%	2.2%	5.2%	4.8%	2.1%	4.0%	4.0%	4.5%	Retained to Com Eq	5.0%							
2007						67%	71%	70%	72%	49%	65%	42%	44%	63%	49%	48%	45%	All Div'ds to Net Prof	44%							
2008						BUSINESS: Southwest Gas Corporation is a regulated gas distributor serving approximately 1.8 million customers in sections of Arizona, Nevada, and California. Comprised of two business segments: natural gas operations and construction services. 2009 margin mix: residential and small commercial, 86%; large commercial and industrial, 4%; transportation, 10%. Total throughput: 2.2 billion																				
12/31/09						therms. Sold PrMerit Bank, 7/96. Has 4,450 employees. Off. & Dir. own 2.0% of common stock; T. Rowe Price Associates, Inc., 7.0%; Barclays Global Investors, 6.8%; GAMCO Investors, Inc., 6.4% (3/09 Proxy). Chairman: James J. Kropid. CEO: Jeffrey W. Shaw. Inc.: CA. Address: 5241 Spring Mountain Road, Las Vegas, Nevada 89193. Telephone: 702-876-7237. Internet: www.swgas.com.																				
(\$mill.)						Southwest Gas began 2010 on a sound note, despite a challenging operating environment. The bottom line should further benefit from higher rates in the company's service territories (discussed below) and improved cost controls. Modest customer growth should also help. Overall, we anticipate a moderate bottom-line advance at Southwest Gas for the current year. Growth will probably continue from 2011 onward. The company has reduced its capital expenditures, given the current low-growth environment. The southwest was one of the nation's hardest hit regions during the housing crisis. Even so, Southwest Gas continues to upgrade and expand its distribution system, and we expect investment in operations will gradually rebound in the coming years.																				
Cash Assets						The company is benefiting from recent rate relief. Southwest Gas has realized higher rates in Nevada, California, and Arizona. In addition, SWX now has improved rate design in Nevada that allows it to more aggressively encourage conservation by its customers. The company's focus on procuring rate relief and improving rate design is important, as such																				
Other						approved revenue increases help it to cope with growth in operating expenses.																				
Current Assets						The board has recently approved a dividend increase of roughly 5%. Starting with the June payout, the quarterly dividend is now \$0.25 per share. This follows other dividend hikes in recent years. We find this pattern encouraging and expect it to continue.																				
Accts Payable						But the stock is not without risk. Warmer-than-usual temperatures during the winter months can hurt profitability at Southwest Gas. Also, the company will probably incur greater costs as it continues to expand operations. Moreover, insufficient, or lagging, rate relief can also hurt performance.																				
Debt Due						These shares remain neutrally ranked for year-ahead relative price performance. Looking further out, we anticipate solid bottom-line growth at the company over the pull to 2013-2015. Income-oriented accounts may find this issue's dividend growth prospects attractive. That said, total return potential for the coming years is not particularly compelling, from the present quotation.																				
Other						Michael Napoli, CFA																				
Current Liab.						March 12, 2010																				
Fix. Chg. Cov.																										
ANNUAL RATES																										
Past 10 Yrs.																										
Past 5 Yrs.																										
Past Est'd '07-'09																										
Revenues																										
"Cash Flow"																										
Earnings																										
Dividends																										
Book Value																										
Cal-endar																										
QUARTERLY REVENUES (\$mill.)																										

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	50
Earnings Predictability	95

To subscribe call 1-800-833-0046.

Tega Cay Water Service, Inc.
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

<u>Line No.</u>		<u>Proxy Group of Six AUS Utility Reports Water Companies</u>	<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution</u>
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.68 %	5.68 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A Rated Public Utility Bonds	<u>0.52 (2)</u>	<u>0.52 (2)</u>
3.	Adjusted Prospective Yield on A Rated Public Utility Bonds	6.20 %	6.20 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	<u>0.00 (3)</u>	<u>0.14 (4)</u>
5.	Adjusted Prospective Bond Yield	6.20	6.34
6.	Equity Risk Premium (5)	<u>4.36</u>	<u>4.19</u>
7.	Risk Premium Derived Common Equity Cost Rate	<u><u>10.56 %</u></u>	<u><u>10.53 %</u></u>

- Notes:
- (1) Derived in Note (3) on page 6 of this Schedule.
 - (2) The average yield spread of A rated public utility bonds over Aaa rated corporate bonds of 0.52% from page 4 of this Schedule.
 - (3) No adjustment necessary as the average Moody's bond rating of the Proxy Group of Six AUS Utility Reports Water Companies is A2 as shown on page 2 of this Schedule.
 - (4) Adjustment to reflect the A3 Moody's Bond Rating of the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies as shown on page 2 of this Schedule. The 14 basis point adjustment is derived by taking 1/3 of the spread between Baa and A2 Public Utility Bonds ($1/3 * 0.41\% = 0.137\%$, rounded to 0.14%).
 - (5) From page 5 of this Schedule.

Notes:

- (1) From page 3 of this schedule.
- (2) From Standard & Poor's Issuer Ranking: U.S. Investor-Owned Water Utilities, Strongest to Weakest, April 5, 2010 and U.S. Natural Gas Distribution and Integrated Gas Companies, Strongest to Weakest April 5, 2010.
- (3) Ratings, business risk and financial risk profiles are those of Golden State Water Company.
- (4) Ratings, business risk and financial risk profiles are those of Aqua Pennsylvania, Inc.
- (5) Ratings, business risk and financial risk profiles are those of California Water Service Company.
- (6) Ratings, business risk and financial risk profiles are those of The Connecticut Water Company.
- (7) Ratings, business risk and financial risk profiles are those of Atlanta Gas Light Company.
- (8) Ratings, business risk and financial risk are those of Laclede Gas Company.
- (9) Ratings, business risk and financial risk profiles are those of South Jersey Gas Company.
- (10) Ratings, business risk and financial risk profiles are those of Washington Gas Light Company.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

Tega Cay Water Service, Inc.
Numerical Assignment for
Moody's and Standard & Poor's Bond Ratings,
Standard & Poor's Credit Ratings, and
Standard & Poor's Business and Financial Risk Profiles

<u>Moody's Bond Rating</u>	<u>Numerical Bond Weighting</u>	<u>Standard & Poor's Bond / Credit Rating</u>
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-

Standard & Poor's

<u>Business Risk Profile</u>	<u>Numerical Weighting</u>	<u>Financial Risk Profile</u>	<u>Numerical Weighting</u>
Excellent	1	Minimal	1
Strong	2	Modest	2
Satisfactory	3	Intermediate	3
Fair	4	Significant	4
Weak	5	Aggressive	5
Vulnerable	6	Highly Leveraged	6

Moody's
Comparison of Interest Rate Trends
for the Three Months Ending February 2010 (1)

Months	Corporate Bonds		Public Utility Bonds		Spread - Corporate v. Public Utility Bonds		Spread - Public Utility Bonds	
	Aaa Rated		Aa Rated	A Rated	Aa (Pub. Util.) over Aaa (Corp.)	A (Pub. Util.) over Aaa (Corp.)	A over Aa	Baa over A
1 February-10	5.35 %		5.62 %	5.87 %				
2 January-10	5.26		5.50	5.77				
3 December-09	5.26		5.44	5.79				
Average of Last 3 Months	<u>5.29 %</u>		<u>5.52 %</u>	<u>5.81 %</u>	<u>0.23 %</u>	<u>0.52 %</u>	<u>0.29 %</u>	<u>0.41 %</u>

Notes: (1) All yields are distributed yields.

Source of Information: Mergent Bond Record, March 2010, Vol. 77, No. 3.

Tega Cay Water Service, Inc.
Judgment of Equity Risk Premium for
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

<u>Line No.</u>		<u>Proxy Group of Six AUS Utility Reports Water Companies</u>	<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>
1.	Calculated equity risk premium based on the total market using the beta approach (1)	4.56	4.23
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A rated bonds (2)	<u>4.15</u>	<u>4.15</u>
3.	Average equity risk premium	<u><u>4.36</u></u> %	<u><u>4.19</u></u> %

Notes: (1) From page 6 of this Schedule.
(2) From page 8 of this Schedule.

Tega Cay Water Service, Inc.
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

<u>Line No.</u>		<u>Proxy Group of Six AUS Utility Reports Water Companies</u>	<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>
1.	Arithmetic mean total return rate on the Standard & Poor's 500 Composite Index - 1926-2009 (1)	11.80 %	11.80 %
2.	Arithmetic mean yield on Aaa and Aa Corporate Bonds 1926-2009 (2)	<u>(6.10)</u>	<u>(6.10)</u>
3.	Historical Equity Risk Premium	<u>5.70 %</u>	<u>5.70 %</u>
4.	Forecasted 3-5 year Total Annual Market Return (3)	12.99 %	12.99 %
5.	Prospective Yield an Aaa Rated Corporate Bonds (4)	<u>(5.68)</u>	<u>(5.68)</u>
6.	Forecasted Equity Risk Premium	<u>7.31 %</u>	<u>7.31 %</u>
7.	Conclusion of Equity Risk Premium (5)	6.51 %	6.51 %
8.	Adjusted Value Line Beta (6)	<u>0.70</u>	<u>0.65</u>
9.	Beta Adjusted Equity Risk Premium	<u>4.56 %</u>	<u>4.23 %</u>

- Notes: (1) Ibbotson® S&P® 2010 Valuation Yearbook - Market Results for Stocks, Bonds, Bills, and Inflation - 1926 - 2009, Morningstar, Inc., 2010 Chicago, IL
- (2) From Moody's Industrial Manual and Mergent Bond Record Monthly Update.
- (3) From page 3 of Schedule 11.
- (4) Average forecast based upon six quarterly estimates of Aaa rated corporate bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated April 1, 2009 (see page 7 of this Schedule). The estimates are detailed below.

Second Quarter 2010	5.30 %
Third Quarter 2010	5.50
Fourth Quarter 2010	5.60
First Quarter 2011	5.70
Second Quarter 2011	5.90
Third Quarter 2011	<u>6.10</u>
Average	<u>5.68 %</u>

- (5) The average of the historical equity risk premium of 5.70% from Line No. 3 and the forecasted equity risk premium of 7.31% from Line No. 6 $((5.70\% + 7.31\%) / 2 = 6.51\%)$.
- (6) From page 9 of this Schedule.

2 ■ BLUE CHIP FINANCIAL FORECASTS ■ APRIL 1, 2010

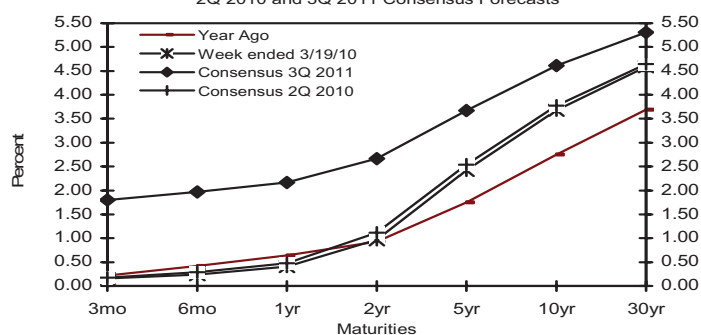
Consensus Forecasts Of U.S. Interest Rates And Key Assumptions¹

Interest Rates	History								Consensus Forecasts-Quarterly Avg.						
	Average For Week End				Average For Month				Latest Q*	2Q 2010	3Q 2010	4Q 2010	1Q 2011	2Q 2011	3Q 2011
	Mar.19	Mar.12	Mar.5	Feb.26	Feb.	Jan.	Dec.	1Q 2010							
Federal Funds Rate	0.18	0.16	0.13	0.12	0.13	0.11	0.12	0.12	0.2	0.2	0.5	0.9	1.3	1.7	
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.2	3.3	3.6	4.0	4.3	4.7	
LIBOR, 3-mo.	0.27	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.3	0.5	0.8	1.2	1.6	2.0	
Commercial Paper, 1-mo.	0.17	0.16	0.13	0.14	0.13	0.13	0.14	0.13	0.2	0.3	0.7	1.1	1.5	1.9	
Treasury bill, 3-mo.	0.16	0.16	0.14	0.12	0.11	0.06	0.05	0.09	0.2	0.3	0.6	1.0	1.4	1.8	
Treasury bill, 6-mo.	0.24	0.22	0.19	0.19	0.18	0.15	0.17	0.17	0.3	0.4	0.8	1.2	1.6	2.0	
Treasury bill, 1 yr.	0.41	0.39	0.34	0.34	0.35	0.35	0.37	0.35	0.5	0.7	1.0	1.4	1.8	2.2	
Treasury note, 2 yr.	0.97	0.93	0.84	0.86	0.86	0.93	0.87	0.90	1.1	1.3	1.7	2.0	2.3	2.7	
Treasury note, 5 yr.	2.42	2.39	2.29	2.37	2.36	2.48	2.34	2.41	2.5	2.7	3.0	3.2	3.4	3.7	
Treasury note, 10 yr.	3.68	3.72	3.62	3.69	3.69	3.73	3.59	3.71	3.8	3.9	4.1	4.3	4.4	4.6	
Treasury note, 30 yr.	4.59	4.67	4.58	4.62	4.62	4.60	4.49	4.61	4.6	4.8	4.9	5.0	5.2	5.3	
Corporate Aaa bond	5.21	5.28	5.24	5.31	5.35	5.26	5.26	5.30	5.3	5.5	5.6	5.7	5.9	6.1	
Corporate Baa bond	6.21	6.30	6.26	6.33	6.34	6.25	6.37	6.29	6.3	6.5	6.7	6.8	6.9	7.1	
State & Local bonds	4.32	4.33	4.34	4.36	4.36	4.33	4.21	4.34	4.5	4.6	4.7	4.8	4.9	5.1	
Home mortgage rate	4.96	4.95	4.97	5.05	4.99	5.03	4.93	5.00	5.2	5.4	5.6	5.7	5.9	6.1	
Key Assumptions	History								Consensus Forecasts-Quarterly						
	2Q 2008	3Q 2008	4Q 2008	1Q 2009	2Q 2009	3Q 2009	4Q 2009	1Q* 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011	2Q 2011	3Q 2011	
	2008	2008	2008	2009	2009	2009	2009	2010	2010	2010	2010	2011	2011	2011	
Major Currency Index	70.9	73.5	81.3	82.7	79.4	75.4	73.6	75.4	75.6	75.8	76.4	76.4	76.6	77.0	
Real GDP	1.5	-2.7	-5.4	-6.4	-0.7	2.2	5.6	2.9	3.0	2.9	3.0	3.0	3.1	3.2	
GDP Price Index	1.8	4.0	0.1	1.9	0.0	0.4	0.5	1.4	1.2	1.4	1.4	1.7	1.7	1.7	
Consumer Price Index	5.2	6.4	-9.2	-2.2	1.9	3.7	2.6	1.7	1.5	1.9	1.8	2.0	2.0	2.2	

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data for interest rates except LIBOR is from Federal Reserve Release (FRSR) H.15. LIBOR quotes available from *The Wall Street Journal*. Interest rate definitions are the same as those in FRSR H.15. Treasury yields are reported on a constant maturity basis. Historical data for the Fed's Major Currency Index is from FRSR H.10 and G.5. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS). *Interest rate data for 1Q 2010 based on historical data through the week ended March 19th. Data for 1Q 2010 Major Currency Index also is based on data through week ended March 19th. Figures for 1Q 2010 Real GDP, GDP Chained Price Index and Consumer Price Index are consensus forecasts based on a special question asked of the panelists this month (see page 14).*

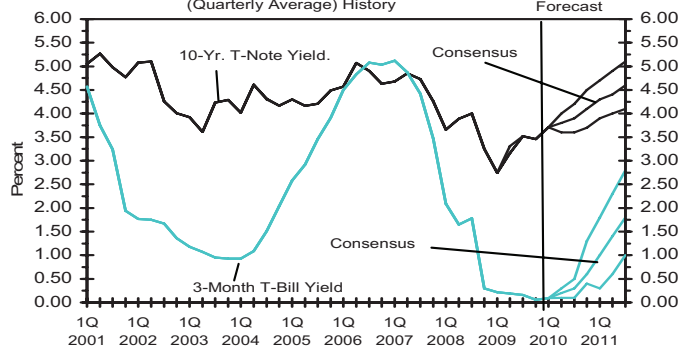
U.S. Treasury Yield Curve

Week ended March 19, 2010 and Year Ago vs.
2Q 2010 and 3Q 2011 Consensus Forecasts



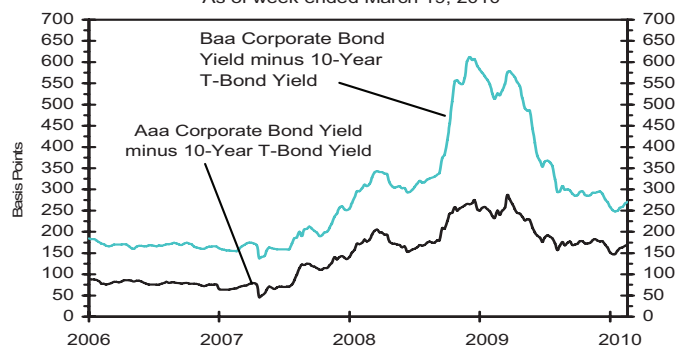
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield

(Quarterly Average) History



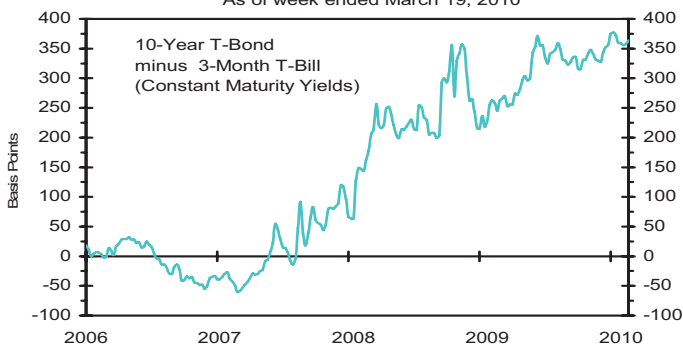
Corporate Bond Spreads

As of week ended March 19, 2010



U.S. Treasury Yield Curve

As of week ended March 19, 2010



Tega Cay Water Service, Inc.
Derivation of Mean Equity Risk Premium Based on a Study
Using Holding Period Returns of Public Utilities

Line No.		Over A Rated Public Utility Bonds AUS Consultants - Utility Services Study (1)
Time Period		1928-2008
1.	Arithmetic Mean Holding Period Returns (2): Standard & Poor's Public Utility Index	10.74 %
2.	Arithmetic Mean Yield on: Moody's A Rated Public Utility Bonds	<u>(6.59)</u>
3.	Equity Risk Premium	<u>4.15 %</u>

- Notes: (1) S&P Public Utility Index and Moody's Public Utility Bond Average Annual Yields 1928-2008, (AUS Consultants - Utility Services, 2009).
- (2) Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in the market value of a security over a one-year holding period.

Tega Cay Water Service, Inc.
Value Line Adjusted Betas for
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

	<u>Value Line Adjusted Beta</u>
<u>Proxy Group of Six AUS Utility Reports Water Companies</u>	
American States Water Co.	0.80
Aqua America, Inc.	0.65
California Water Service Group	0.75
Connecticut Water Service, Inc.	0.80
Middlesex Water Company	0.60
York Water Company	<u>0.65</u>
Average	<u><u>0.71</u></u>
Median	<u><u>0.70</u></u>
 <u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>	
AGL Resources Inc.	0.75
Atmos Energy Corporation	0.65
Delta Natural Gas Company	0.65
Laclede Group, Inc.	0.60
New Jersey Resources Corp.	0.65
Northwest Natural Gas Co.	0.60
Piedmont Natural Gas Co., Inc.	0.65
South Jersey Industries, Inc.	0.60
Southwest Gas Corporation	0.75
WGL Holdings, Inc.	<u>0.60</u>
Average	<u><u>0.65</u></u>
Median	<u><u>0.65</u></u>

Source of Information: Value Line Investment Survey, January 22, 2010 and
March 12, 2010, Standard Edition and Small and Mid-
Cap Edition

Tega Cay Water Service, Inc.
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model
the Proxy Group of Six AUS Utility Reports Water Companies
and Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies

<u>Line No.</u>		<u>Proxy Group of Six AUS Utility Reports Water Companies</u>	<u>Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies</u>
1.	Traditional Capital Asset Pricing Model (1)	10.09 %	9.72 %
2.	Empirical Capital Asset Pricing Model (1)	<u>10.64 %</u>	<u>10.36 %</u>
3.	Conclusion	<u><u>10.37 %</u></u>	<u><u>10.04 %</u></u>

Notes: (1) From page 2 of this Schedule.

Tega Cay Water Service, Inc.
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model

	<u>1</u>	<u>2</u>	<u>3</u>
	Value Line Adjusted Beta	Company-Specific Risk Premium Based on Market Premium of 7.31%	CAPM Result Including Risk-Free Rate of 4.97% (2)
<u>Traditional Capital Asset Pricing Model (3)</u>			
Proxy Group of Six AUS Utility Reports			
<u>Water Companies</u>			
American States Water Co.	0.80	5.85 %	10.82 %
Aqua America, Inc.	0.65	4.75	9.72
California Water Service Group	0.75	5.48	10.45
Connecticut Water Service, Inc.	0.80	5.85	10.82
Middlesex Water Company	0.60	4.39	9.36
York Water Company	0.65	4.75	9.72
Average	<u>0.71</u>	<u>5.18 %</u>	<u>10.15 %</u>
Median	<u>0.70</u>	<u>5.12 %</u>	<u>10.09 %</u>

Proxy Group of Ten AUS Utility Reports			
<u>Natural Gas Distribution Companies</u>			
AGL Resources Inc.	0.75	5.48 %	10.45 %
Atmos Energy Corporation	0.65	4.75	9.72
Delta Natural Gas Company	0.65	4.75	9.72
Laclede Group, Inc.	0.60	4.39	9.36
New Jersey Resources Corp.	0.65	4.75	9.72
Northwest Natural Gas Co.	0.60	4.39	9.36
Piedmont Natural Gas Co., Inc.	0.65	4.75	9.72
South Jersey Industries, Inc.	0.60	4.39	9.36
Southwest Gas Corporation	0.75	5.48	10.45
WGL Holdings, Inc.	0.60	4.39	9.36
Average	<u>0.65</u>	<u>4.75 %</u>	<u>9.72 %</u>
Median	<u>0.65</u>	<u>4.75 %</u>	<u>9.72 %</u>

Empirical Capital Asset Pricing Model (4)

Proxy Group of Six AUS Utility Reports			
<u>Water Companies</u>			
American States Water Co.	0.80	6.21 %	11.18 %
Aqua America, Inc.	0.65	5.39	10.36
California Water Service Group	0.75	5.94	10.91
Connecticut Water Service, Inc.	0.80	6.21	11.18
Middlesex Water Company	0.60	5.12	10.09
York Water Company	0.65	5.39	10.36
Average	<u>0.71</u>	<u>5.71 %</u>	<u>10.68 %</u>
Median	<u>0.70</u>	<u>5.67 %</u>	<u>10.64 %</u>

Proxy Group of Ten AUS Utility Reports			
<u>Natural Gas Distribution Companies</u>			
AGL Resources Inc.	0.75	5.94 %	10.91 %
Atmos Energy Corporation	0.65	5.39	10.36
Delta Natural Gas Company	0.65	5.39	10.36
Laclede Group, Inc.	0.60	5.12	10.09
New Jersey Resources Corp.	0.65	5.39	10.36
Northwest Natural Gas Co.	0.60	5.12	10.09
Piedmont Natural Gas Co., Inc.	0.65	5.39	10.36
South Jersey Industries, Inc.	0.60	5.12	10.09
Southwest Gas Corporation	0.75	5.94	10.91
WGL Holdings, Inc.	0.60	5.12	10.09
Average	<u>0.65</u>	<u>5.39 %</u>	<u>10.36 %</u>
Median	<u>0.65</u>	<u>5.39 %</u>	<u>10.36 %</u>

See page 3 for notes.

Tega Cay Water Service, Inc.
Development of the Market-Required Rate of Return on Common Equity Using
the Capital Asset Pricing Model for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies
Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

Notes:

- (1) For reasons explained in Ms. Ahern's accompanying direct testimony, from the three previous month-end (January 2010 – March 2010), as well as a recently available (April 16, 2010), Value Line Summary & Index, a forecasted 3-5 year total annual market return of 12.99% can be derived by averaging the 3-month and spot forecasted total 3-5 year total appreciation, converting it into an annual market appreciation and adding the Value Line average forecasted annual dividend yield.

The 3-5 year average total market appreciation of 52% produces a four-year average annual return of 11.04% $((1.52^{.25}) - 1)$. When the average annual forecasted dividend yield of 1.95% is added, a total average market return of 12.99% (1.95% + 11.04%) is derived.

The 3-month and spot forecasted total market return of 12.99% minus the forecasted risk-free rate of 4.97% (developed in Note 2) is 8.02% (12.99% - 4.97%). The Morningstar, Inc. (Ibbotson Associates) calculated market premium of 6.60% for the period 1926-2009 results from a total market return of 11.80% less the average income return on long-term U.S. Government Securities of 5.20% (11.80% - 5.20% = 6.60%). This is then averaged with the 8.09% Value Line market premium resulting in a 7.31% market premium. The 7.31% market premium is then multiplied by the beta in column 1 of page 2 of this Schedule.

- (2) The average forecast based upon six quarterly estimates of 30-year Treasury Note yields per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts dated April 1, 2010 (see page 7 of Schedule 10). The estimates are detailed below:

	<u>30-Year Treasury Note Yield</u>
Second Quarter 2010	4.60
Third Quarter 2010	4.80
Fourth Quarter 2010	4.90
First Quarter 2011	5.00
Second Quarter 2011	5.20
Third Quarter 2011	<u>5.30</u>
Average	<u>4.97%</u>

- (3) The traditional Capital Asset Pricing Model (CAPM) is applied using the following formula:

$$R_S = R_F + \beta (R_M - R_F)$$

Where R_S = Return rate of common stock
 R_F = Risk Free Rate
 β = Value Line Adjusted Beta
 R_M = Return on the market as a whole

- (4) The empirical CAPM is applied using the following formula:

$$R_S = R_F + .25 (R_M - R_F) + .75 \beta (R_M - R_F)$$

Where R_S = Return rate of common stock
 R_F = Risk-Free Rate
 β = Value Line Adjusted Beta
 R_M = Return on the market as a whole

Source of Information: Value Line Summary & Index
Blue Chip Financial Forecasts, April 1, 2010
Value Line Investment Survey, January 22, 2010 and March 12, 2010, Standard Edition and Small and Mid-Cap Edition
Ibbotson® SBBI® 2010 Valuation Yearbook – Market Results for Stocks, Bonds, Bills, and Inflation – 1926 – 2009, Morningstar, Inc., 2010 Chicago, IL

Tega Cay Water Service, Inc.
Comparable Earnings Analysis
for a Proxy Group of Eighty-Nine Non-Utility Companies Comparable to the
Proxy Group of Six AUS Utility Reports Water Companies(1)

Company Name	VL Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta	Rate of Return on Book Common Equity, Net Worth, or Partner's Capital	
					5-Year Projected (2)	
					5 Year Projection	Student's T Statistic
ACE Limited	0.85	0.73	3.0742	0.0669	10.50 %	(0.7)
Accenture Plc	0.85	0.74	2.9315	0.0638	43.00 (3)	3.7
Gallagher (Arthur J.)	0.70	0.54	3.0716	0.0668	20.00	0.6
Aon Corp.	0.70	0.47	3.1403	0.0683	14.00	(0.2)
Beckman Coulter	0.75	0.61	3.1918	0.0694	13.00	(0.4)
BMC Software	0.85	0.73	3.1543	0.0686	19.50	0.5
Bristol-Myers Squibb	0.75	0.59	3.0886	0.0672	17.50	0.2
Buckeye Partners L.P.	0.85	0.75	3.1061	0.0675	14.50	(0.2)
Brown & Brown	0.70	0.48	3.1456	0.0684	12.50	(0.4)
ConAgra Foods	0.65	0.42	2.8885	0.0628	15.50	(0.0)
Capitol Fed. Finl	0.65	0.44	3.0220	0.0657	9.00	(0.9)
Check Point Software	0.80	0.62	3.3652	0.0732	14.00	(0.2)
Covidien Plc	0.80	0.64	3.2090	0.0743	15.50	(0.0)
CVS Caremark Corp.	0.80	0.66	3.1452	0.0684	10.50	(0.7)
Quest Diagnostics	0.65	0.46	2.9463	0.0641	15.50	(0.0)
Del Monte Foods	0.70	0.51	3.4000	0.0739	11.50	(0.6)
Dionex Corp.	0.90	0.78	3.5519	0.0772	17.00	0.2
DaVita Inc.	0.65	0.41	3.0854	0.0671	16.00	0.0
Enterprise Products	0.85	0.76	3.1170	0.0678	18.50	0.4
Elbit Systems	0.70	0.53	3.4145	0.0743	17.50	0.2
Energy Transfer	0.80	0.69	3.0862	0.0671	28.50	1.8
First Niagara Finl Group	0.85	0.70	3.6141	0.0786	8.00	(1.1)
Forest Labs.	0.80	0.63	3.5470	0.0771	13.50	(0.3)
Gilead Sciences	0.65	0.43	3.5879	0.0780	27.00	1.5
G&K Services `A	0.80	0.64	3.5505	0.0772	8.00	(1.1)
Global Payments	0.85	0.70	3.6330	0.0790	16.50	0.1
Gen-Probe	0.85	0.73	3.7116	0.0807	13.00	(0.4)
Haemonetics Corp.	0.60	0.39	3.1976	0.0695	12.50	(0.4)
Hasbro, Inc.	0.75	0.60	3.2682	0.0711	22.00	0.9
Hudson City Bancorp	0.80	0.69	2.9839	0.0649	11.00	(0.6)
HCC Insurance Hldgs.	0.85	0.70	3.0771	0.0669	12.00	(0.5)
Hewitt Associates A	0.75	0.57	3.3858	0.0736	18.50	0.4
Hospira Inc.	0.70	0.53	3.6182	0.0787	21.50	0.8
Interactive Data	0.85	0.70	3.1973	0.0695	14.50	(0.2)
IDEXX Labs.	0.85	0.75	3.3726	0.0733	24.00	1.1
Investors Bancorp Inc	0.70	0.52	3.4367	0.0755	7.00	(1.2)
Intl Speedway A	0.85	0.77	3.5449	0.0771	8.00	(1.1)
J&J Snack Foods	0.70	0.50	3.4948	0.0760	12.50	(0.4)
Henry (Jack) & Assoc.	0.80	0.69	2.9121	0.0633	16.00	0.0
Kroger Co.	0.60	0.37	2.9423	0.0640	23.00	1.0
Lancaster Colony	0.75	0.57	3.2490	0.0707	19.00	0.5
Life Technologies	0.80	0.65	3.6691	0.0798	11.00	(0.6)
Lincare Holdings	0.65	0.47	3.3023	0.0718	19.50	0.5
Matthews Intl	0.80	0.68	3.2033	0.0697	16.00	0.0
McKesson Corp.	0.80	0.63	3.3044	0.0719	13.50	(0.3)
Mercury General	0.70	0.54	2.9352	0.0638	10.00	(0.8)
Medtronic, Inc.	0.75	0.61	3.4419	0.0749	20.00	0.6
Medco Health Solutions	0.70	0.48	3.5559	0.0773	15.00	(0.1)
Markel Corp.	0.85	0.77	3.4564	0.0752	7.00	(1.2)
Marsh & McLennan	0.75	0.58	3.1110	0.0677	14.50	(0.2)
MAXIMUS Inc.	0.80	0.64	3.3308	0.0724	14.50	(0.2)
Microsoft Corp.	0.80	0.66	3.0200	0.0657	31.50 (3)	2.2
NIKE, Inc. B	0.85	0.74	2.9431	0.0640	17.00	0.2
Northwest Bancshares	0.80	0.65	3.4087	0.0741	6.50	(1.3)
New York Community	0.80	0.67	3.6679	0.0798	11.00	(0.6)
Owens & Minor	0.70	0.50	3.4975	0.0761	13.50	(0.3)
OReilly Automotive	0.85	0.70	3.6272	0.0789	11.00	(0.6)
Plains All Amer. Pipe.	0.85	0.76	3.6234	0.0788	10.00	(0.8)
Peoples United Finl	0.65	0.39	3.2206	0.0700	5.50	(1.4)
PerkinElmer Inc.	0.85	0.77	3.6680	0.0798	10.50	(0.7)
Ruddick Corp.	0.60	0.34	3.5639	0.0775	11.00	(0.6)
Everest Re Group Ltd.	0.80	0.63	2.9273	0.0637	10.50	(0.7)
RLI Corp.	0.80	0.64	3.0058	0.0654	11.00	(0.6)
RenaissanceRe Hldgs.	0.70	0.48	3.4476	0.0750	11.00	(0.6)

Tega Cay Water Service, Inc.
Comparable Earnings Analysis
for a Proxy Group of Twenty-Six Non-Utility Companies Comparable to the
Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies(6)

Rate of Return on Book Common
Equity, Net Worth, or Partner's
Capital
5-Year Projected (2)

Company Name	VL Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta	5 Year Projection	Student's T Statistic
AmerisourceBergen	0.70	0.52	2.6681	0.0580	15.00 %	(0.7)
Automatic Data Proc.	0.70	0.54	2.1526	0.0468	16.00	(0.6)
Baxter Intl Inc.	0.60	0.37	2.5631	0.0557	26.50	0.3
Bard (C.R.)	0.60	0.32	2.5422	0.0553	20.00	(0.3)
Becton, Dickinson	0.60	0.38	2.5876	0.0563	20.50	(0.3)
Church & Dwight	0.60	0.33	2.4570	0.0534	15.00	(0.7)
Colgate-Palmolive	0.55	0.30	2.3334	0.0507	41.00	1.6
Clorox Co.	0.65	0.40	2.3216	0.0505	58.50 (7)	3.1
Campbell Soup	0.60	0.33	2.4305	0.0529	35.00	1.0
Erie Indemnity Co.	0.70	0.52	2.2347	0.0486	20.00	(0.3)
Hormel Foods	0.65	0.40	2.6490	0.0576	16.00	(0.6)
Schein (Henry)	0.75	0.59	2.7289	0.0593	15.00	(0.7)
Hershey Co.	0.65	0.46	2.7670	0.0602	42.50	1.7
Intl Flavors & Frag.	0.75	0.59	2.4033	0.0523	21.00	(0.2)
Kraft Foods	0.65	0.46	2.5589	0.0556	10.50	(1.1)
Kinder Morgan Energy	0.75	0.59	2.5093	0.0546	24.50	0.1
Coca-Cola	0.60	0.34	2.2123	0.0481	23.00	(0.0)
Laboratory Corp.	0.65	0.40	2.6524	0.0577	19.00	(0.4)
McDonalds Corp.	0.65	0.46	2.4760	0.0538	30.50	0.6
McCormick & Co.	0.55	0.29	2.5864	0.0562	18.00	(0.5)
PepsiCo, Inc.	0.60	0.37	2.2671	0.0493	27.50	0.4
Pfizer, Inc.	0.75	0.58	2.7581	0.0600	13.50	(0.9)
Raytheon Co.	0.70	0.54	2.6520	0.0577	17.50	(0.5)
Sysco Corp.	0.70	0.54	2.6278	0.0571	34.00	1.0
Tootsie Roll Ind.	0.70	0.51	2.5538	0.0555	8.00	(1.4)
Wal-Mart Stores	0.60	0.36	2.3465	0.0510	17.50	(0.5)
Average	0.65	0.44	2.5015	0.0544		
Average for the Proxy Group of Ten AUS Utility Reports Natural Gas Distribution Companies	0.66	0.43	2.4716 (9)	0.0538		
Median					20.00%	
Conservative Median (9)					20.00%	

See Page 4 for notes.

See Page 4 for notes.

Tega Cay Water Service, Inc.
Comparable Earnings Analysis

Notes:

- (1) The criteria for selection of the proxy group of eighty-nine non-utility companies was that the non-utility companies be domestic and have a meaningful projected rate of return on book common equity, shareholders' equity, net worth, or partners' capital 2012 – 2014 as reported in Value Line Investment Survey (Standard Edition). The proxy group of eighty-nine non-utility companies was selected based upon the proxy group of six AUS Utility Reports water companies' unadjusted beta range of 0.34 – 0.78 and standard error of the regression range of 2.8858 - 3.7618. These ranges are based upon plus or minus three standard deviations of the unadjusted beta and standard error of the regression as detailed in Ms. Ahern's direct testimony. Plus or minus three standard deviations captures 99.73% of the distribution of unadjusted betas and standard errors of the regression.
- (2) 2012 - 2014.
- (3) The Student's T-statistic associated with these returns exceeds 1.96 at the 95% level of confidence. Therefore, they have been excluded, as outliers, to arrive at proper projected returns as fully explained in Ms. Ahern's testimony.
- (4) The standard deviation of the group of six AUS Utility Reports water companies' standard error of the regression is 0.1460. The standard deviation of the standard error of the regression is calculated as follows:

$$\text{Standard Deviation of the Std. Err. of the Regr.} = \frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

$$\text{Thus, } 0.1460 = \frac{3.3238}{\sqrt{518}} = \frac{3.3238}{22.7596}$$

- (5) Median five year projected rate of return on book common equity, shareholder's equity, net worth, or partners' capital including returns identified as outliers as outlined in Note (3) above.
- (6) The criteria for selection of the proxy group of twenty-six non-utility companies was that the non-utility companies be domestic and have a meaningful rate of return on book common equity, shareholders' equity, net worth, or partners' capital projected 2012 -2014 as reported in Value Line Investment Survey (Standard Edition). The proxy group of twenty-six non-utility companies was selected based upon the proxy group of ten AUS Utility Reports natural gas distribution companies' unadjusted beta range of 0.27 – 0.59 and standard error of the regression range of 2.1458 – 2.7974. These ranges are based upon plus or minus three standard deviations of the unadjusted beta and standard error of the regression as detailed in Ms. Ahern's direct testimony. Plus or minus three standard deviations captures 99.73% of the distribution of unadjusted betas and standard errors of the regression.
- (7) The Student's T-statistic associated with these returns exceeds 2.06 at the 95% level of confidence. Therefore, they have been excluded, as outliers, to arrive at proper projected returns as fully explained in Ms. Ahern's testimony.
- (8) The standard deviation of the proxy group of eight AUS Utility Reports natural gas distribution companies' standard error of the regression is 0.1086 (2.4716 / 22.7596).
- (9) Median five year projected rate of return on book common equity, shareholder's equity, net worth, or partners' capital including returns identified as outliers as outlined in Note (8) above.

Source of Information: Value Line, Inc., March 15, 2010
Value Line Investment Survey (Standard Edition)